INTRODUCTION

Agricultural loans can be broadly defined as loans made to agricultural producers to finance the production of crops or livestock. The term ‘‘crops’’ is meant to include any of the many types of plants that produce grains, fruits, vegetables, or fibers that can be harvested. Similarly, a variety of animals is produced for profit, although cattle, swine, sheep, and poultry are by far the most common. Production cycles vary with the type of crop or livestock, from a few weeks or months to several years; in the case of an orchard crop or timber, the time from planting to harvest (from cash outlay to the generation of income) is quite lengthy. The type of crop or livestock to be produced will determine the nature of the financing needed, including its timing, collateral considerations, and repayment terms.

Repayment terms for farm loans normally correspond to anticipated cash flows. Since repayment of agricultural-related loans usually comes from the sale of crops or livestock, annual repayment terms are not uncommon. Depending on the type of operation and timing of cash income, payments may be set to come due semiannually, quarterly, or on an irregular schedule. However, many smaller farm operators also receive income from nonfarm employment, which allows them to make monthly payments on some loans.

Agricultural producers need access to land (often with buildings and other improvements) and equipment, in addition to the shorter-term operating inputs directly involved in crop or livestock production. Not all producers own land; some are tenants who pay the landowners cash rent or a portion of the crop yield. Many producers both own and rent or lease land in an effort to maximize efficiency and income. Accordingly, individual producers may need a variety of types of loans, including—

- real estate loans,
- equipment loans,
- livestock loans, and
- operating (or production) loans.

Information on each of these types of agricultural loans follows, as well as general comments on agricultural lending and the examiner’s review of agricultural loans.

AGRICULTURAL REAL ESTATE LOANS

Real estate loans are not intended as a primary focus of this manual section. However, real estate loans are a significant portion of total debt for many agricultural producers, and the examiner should consider them when evaluating other types of loans to agricultural producers. For a more thorough discussion of real estate loans, refer to section 2090.1, ‘‘Real Estate Loans.’’ Loans to finance agricultural land, together with related improvements (frequently including the producer’s residence) comprise the most common type of real estate loan made by agricultural banks. These loans are subject to the same general lending principles and legal and regulatory requirements[1] as loans on other types of real estate. Even if a bank has not made a real estate loan to the agricultural borrower, any real estate debt owed elsewhere must be considered in analyzing the borrower’s creditworthiness, along with amounts due to the bank and any other creditors. Additionally, any state laws on homestead exemptions should be noted.

Agricultural real estate loans tend to have special characteristics, particularly with regard to valuation and repayment considerations. For instance, farmland appraisers need special knowledge of soil types, topography, data on rainfall or water tables, and crop production data, as well as a knowledge of area market conditions and other extenuating information. Prevailing market values for farmland tend not to permit as high a level of cash return as those for other types of income-producing property. Values always reflect supply and demand, and, probably due to a number of factors, the demand for farmland has traditionally been relatively strong from neighboring landowners, other area farmers, nonfarmers, and absentee owners who have a strong desire to own land. A lower level of return generally dictates a lower loan-to-value ratio, although a borrower may be able to

1. In connection with the supervisory loan-to-value limits set forth in the ‘‘Interagency Guidelines for Real Estate Lending Policies,’’ farmland, ranchland, or timberland committed to ongoing management and agricultural production is considered ‘‘improved property,’’ subject to a loan-to-value limit of 85 percent. However, a bank may set a lower limit for itself and, as a matter of policy, probably will loan less than 85 percent of appraised value on farmland in most cases.

service debt at a higher level from other income sources such as less-heavily encumbered land, rented land, or nonfarm income. For example, it would not be unusual for a bank to advance 100 percent of the purchase price of land if a lien on additional land is taken to lower the overall loan-to-value ratio.

There is generally a well-established market for agricultural land. Although values fluctuate based on a variety of factors (just as they do with other types of real estate), there is normally a recognized range of values at any given time for particular land types within a general area. The examiner should gain some knowledge of current area land prices and trends through published data from local universities or private organizations, interviews with bank management, and the review of appraisal reports. This knowledge will be vital in assessing collateral values and the borrower's overall financial condition and future prospects.

An amortization period of up to 20 years is not uncommon for agricultural real estate loans by banks. Longer-term loans (up to 30 years) on farm real estate are sometimes made by commercial banks, but are more common with other lenders such as Federal Land Banks. Many banks structure real estate loans so that required payments are based on a 20- to 30-year amortization, but they write the notes with a 5- to 10-year maturity, at which time a balloon payment is due. Major improvements, such as livestock-confinement buildings or grain-handling facilities, commonly have a shorter amortization period of 10 years or less.

AGRICULTURAL MACHINERY AND EQUIPMENT LOANS

Agricultural producers often need to finance the purchase of machinery, equipment, vehicles, and implements. Typically, these loans are secured by the durable goods being financed and are amortized over an intermediate term of up to seven years. As with any equipment loan, some borrower equity should be required, the amortization period should be no longer than the expected useful life of the equipment, and scheduled payments should correlate reasonably with the timing and amount of anticipated income. In some cases, equipment loan payments may be advanced under the borrower s operating line of credit.

Loans to farmers and ranchers may include individual notes to finance the purchase of specific pieces of equipment or vehicles. However, many agricultural borrowers provide the bank with a blanket lien on all equipment and vehicles to secure any and all debts owed the bank. Frequently, borrowers have both purchase money loans on specific equipment and other loans secured by a blanket equipment lien.

Under the Uniform Commercial Code, a security interest in equipment is created with a security agreement signed by the borrower and a bank officer, and the lien is perfected by a centrally filed financing statement. Many banks file the financing statement in both the county and state in which the borrower resides *and* in the county and state in which the equipment is located. The filing is a public record that notifies lenders or other interested parties that the assets identified have been pledged, as well as to whom and when they were pledged.

Since the filing record provides vital information for potential lenders, bank management must check it before extending credit to determine whether the collateral is already pledged to another lender. In many cases, a bank might approve a loan request only if it were to be in a first lien position, but there can be exceptions. For example, a bank may agree to advance on a second lien position in a large piece of equipment in which the borrower has substantial equity or take a blanket lien on all equipment, including one or a few items of equipment pledged elsewhere (such as a purchase money lien held by an equipment dealer). As a matter of prudent lending and sound loan administration, lien searches should be performed periodically on at least larger borrowers or on those borrowers known to be or suspected of having problems or of being involved with other lenders.

Sound bank lending policies should prescribe a maximum loan-to-value ratio for equipment, as well as maximum repayment terms. The same is true for vehicles, although the loan-to-value limits on vehicles for highway use (automobiles and trucks) tend to be higher because they have a less-specialized use and are more liquid. Maximum loan-to-value limits, particularly for loans to purchase specific pieces of farm equipment, may range to more than 80 percent or even to 100 percent for strong borrowers. However, many farm lines of credit are supported in part by blanket liens on all the borrower's equipment. Typically, overall loan-to-value ratios on a line of equipment do not exceed 60 percent.

LIVESTOCK LOANS

Livestock loans vary with the animal species and the nature of the individual producer's operation, but the same general lending principles apply to virtually all types of livestock loans. The borrower should have an equity position in the livestock financed, ample feed on hand, or another underlying financial strength that will protect the lender from risks such as losses from animal diseases and deaths, rising feed costs, or market fluctuations. The size of the livestock operation should be commensurate with the borrower's physical facilities and management capability. Total debt should not overburden the borrower, and the timing and source of repayment for loans should be understood when they are originated. The term of a livestock loan normally bears a close relationship to the length of time the animals are to be held.

Feed is a necessity for livestock producers and a major expense for those involved in finishing animals for slaughter, dairy herds, or egg-laying operations. On the other hand, stocker cattle feed mainly on pasture or silage, which reduces feed costs. Some livestock producers also raise feed crops, which may improve their overall efficiency. Many producers, however, need to buy feed. In any event, the loan officer should have a firm understanding of how much feed the borrower has on hand (or will be harvesting) and how much will have to be purchased. Still, even though both borrower and banker may be experienced and capable at projecting feed costs, variables beyond their control impose some risk of increased costs. These variables might include perils such as unfavorable weather or disease affecting feed crop yields or rising feed prices or shortages brought on by other unanticipated forces.

Many banks will advance up to 100 percent of the cost of livestock if the borrower has sufficient feed on hand and a sound overall financial position. Since the animals gain weight and value as feedstocks are consumed, the bank's collateral position normally strengthens as the livestock matures toward market weight. For borrowers without adequate feedstocks on hand, advance rates may be limited to 70 to 80 percent of the purchase price.

TYPES OF LIVESTOCK OPERATIONS AND LOAN CONSIDERATIONS

Livestock producers usually specialize in particular kinds or breeds of animals or in certain phases of an animal's life cycle. This specialization may vary depending on geographic area, climate, topography, soil type, or the availability of water and feed, or on the producer's preferences, experience, or physical facilities. A producer may change his specialization from time to time based on recurring market cycles or more fundamental shifts in economic factors, such as consumer demand. Some producers are involved in more than one type of livestock operation at any given time.

The following is a brief discussion of the most common types of livestock operations, as well as the lending and loan analysis considerations for each.

Cattle

Beef Breeds

- *Cow-calf operation.* A producer has breeding stock that produces calves, which are then sold as either feeder calves or future breeding stock or are kept until the animal reaches full maturity.

  The typical cow-calf loan is for financing the breeding stock (cows and bulls) of a herd. The loan term is usually three to five years, with annual payments of principal and interest to fully amortize the loan within that term. Often, loans for this type of operation are written with one-year maturities and no predetermined amount of principal reduction at maturity. However, this kind of loan structure is more suitable for borrowers who are not highly leveraged.

  Repayment is from the annual sale of calves and cull cows (older cows or those that fail to produce offspring). Approximately 10 to 15 percent of a cow herd is culled each year; most cows are retained for seven to as many as twelve years. Bulls are typically stocked at one for each 20 to 25 cows; pregnancy rates are generally 80 to 100 percent, depending on the age and health of the cows and on feed availability.

Most calves are born in late winter and early spring, weighing around 100 pounds. Cows may be winter-fed on hay, but cows and calves graze on pastureland from spring to around October when the calves weigh 500 to 550 pounds. At this time, the calves may be sold to another producer who specializes in raising stockers. (However, in some areas, herds are managed to produce fall calves. Also, depending on feed sources and market conditions, calves may be sold at lighter weights, around 300 to 400 pounds.)

- *Stocker or backgrounding operation.* A producer in a stocker operation acquires calves weighing from 300 to 550 pounds and feeds them, primarily on pasture, until they weigh around 700 to 750 pounds, when they are sold to a finisher. Since the growth gains of young cattle are generally the most efficient phase of beef production, some stock operators prefer to buy lighter weight calves, although the lighter weights require more care and supervision to minimize death losses. Stocker operations are relatively high-risk programs that require specialized knowledge, but they can also be quite profitable.

Backgrounding requires approximately 100 days, during which time the cattle may be fed a daily ration of silage (the entire corn or grain sorghum plant chopped into feed and stored in a silo) and grain and feed supplements, including soybean meal, minerals, salt, and vitamins. The supplements usually need to be purchased. Steers gain approximately two pounds per day, and heifers slightly less. Sometimes stocker cattle are placed on pasture, which can include dormant wheat in the winter or grass during the summer.

Stocker cattle are typically financed with a 90- to 120-day single-advance, single-maturity note. Funds for feed purchases may be provided as part of the note proceeds, but, more commonly, the feed is raised by the producer. Loan repayment comes from the sale of the cattle when they weigh around 700 to 750 pounds. Collateral for stocker loans is typically the cattle financed and the feed. Banks usually require around a 30 percent margin in the cattle, but may require as little as 20 percent or less for financially strong borrowers.

The profitability of a backgrounding operation is sensitive to the average daily weight gain, feed costs, weather, and purchase and sale prices of the cattle.

- *Finishing operation.* A finishing operation acquires cattle weighing approximately 700 to 750 pounds and feeds them a high-protein grain ration until they are ready for slaughter at around 1,100 to 1,200 pounds.

Finishing usually takes around 130 to 145 days. Most finishing cattle are now custom-fed in commercial feedlots, but the producer (not the feedlot owner) usually retains ownership of the cattle. Feeder steers usually gain approximately 3.2 pounds per day, and heifers around 2.8 pounds per day. However, average daily gains vary depending on the breed, type of ration, time of year, or weather conditions.

Finishing cattle can be risky because of fluctuations in cattle prices between purchase and sale dates. Some producers use futures contracts to lock in prices and reduce the risk, or they enter into forward contracts with a packer. Larger producers may use a ‘‘moving hedge’’ to offset the risk imposed by market cycles.[2]

Banks normally require 20 to 30 percent initial margin in financing the purchase of feeder cattle, but may advance up to 100 percent of the feed costs. As the cattle gain weight, the bank’s collateral position tends to improve. Repayment comes from sale of the cattle, with loan maturity set near the anticipated sale date.

Dairy Operations

Cows are milked for ten months each year, then rested for two months and allowed to ‘‘dry up’’ (quit producing milk by not being milked). Three months after a female dairy cow gives birth, she is rebred and calves nine months later. Cows are commonly bred through artificial insemination, which allows the producer to improve the genetics of the herd. Each year approximately one-third of the cows are culled,

2. In this strategy, the producer periodically buys a given number of lightweight feeders and at the same time sells a similar number of fat cattle. When prices are down, lower revenues from sales of cattle are offset by the benefit of lower costs to purchase replacement lightweight feeders. By the same token, when prices are up, higher purchase costs are offset by higher revenues on the slaughter cattle sold. This strategy allows the producer to prevent or substantially minimize losses due to fluctuating market prices. Otherwise, the producer might too often be in the position of only buying at high prices and only selling at low prices.

with replacement heifers usually raised on the farm. An 80 percent calf crop is common, with the males either sold soon after birth or fed for slaughter.

Milk production is measured by pounds of milk produced per cow per year. Production in the range of 13,500 to 20,500 pounds is common. Milk production variables include the quality of the cows, number of days milked each year, and amount and quality of feed. Feeding cows a higher ratio of grain to dry hay will result in higher milk production, but the higher feed costs must be weighed against the returns of higher production.

Feed is a major expense for a dairy operation. Dairy cows consume a ration of corn or grain sorghum, soybean meal, high-quality hay, silage, vitamins, and minerals. Family-oriented dairy operations usually grow most of their own feed on the farm, while larger operations purchase most of their feed and confine the cows to a dry-lot facility.

A dairy operation is heavily capital intensive because of the investment in cows, buildings, and equipment. Dairying is also labor intensive, which further adds to the cost of production.

The efficiency of a dairy operation is measured on a ‘‘per-cow’’ basis. Gross income, expenses, and net income can be divided by the number of cows to analyze trends and compare them with other dairy operations. Several other key indicators of a dairy operation's productivity include the following:

- *Pounds of milk per cow per year.* Herds averaging less than 14,000 pounds may be struggling.
- *Calving interval.* Twelve to thirteen months is favorable; if the interval lengthens, milk production and the overall efficiency of the operation will decline.
- *Calf losses.* A 10 percent or less loss on live calves born is favorable and considered an indication of good management.
- *Culling rate.* Cows should start milking when they are about two years old and should average four to five lactation periods before they are culled; if cows have to be culled prematurely, efficiency declines.

Loans to dairy operators may include longer-term financing for land and improvements; intermediate financing for the cow herd, specialized equipment, and vehicles; and operating loans to help finance the production of feed crops. Established operations may not require herd financing unless the herd is being expanded. Financing replacement cows to maintain a herd, if necessary, should be included in a shorter-term operating loan. Generally, operating loans are not a major financing activity as the dairy farmer's regular income from the sale of milk can often accommodate operating needs.

Collateral for dairy loans, in addition to real estate, typically includes the livestock, crops and feed on hand, and equipment. The collateral is usually covered with a blanket security agreement. Often, milk sale proceeds are assigned to the bank, and the milk buyer sends a monthly check directly to the bank to meet scheduled loan repayments.

Clearly, the primary source of income for the dairy farmer is the sale of milk, which is produced daily. Additional income is produced from the annual sale of calves and culled cows.

Hogs

Hog production consists of a two-stage operation: (1) ‘‘farrowing’’ (breeding sows to produce feeder pigs) and (2) ‘‘finishing’’ (fattening feeder pigs to slaughter weight). Many producers combine both enterprises and are called farrow-to-finish operations.

Hog producers range from small operators to large corporate interests. The small producers can be considered those who market less than 2,500 head per year; they can be involved either in finishing hogs or in farrow-to-finish operations. Small producers also tend to be involved in grain farming (raising their own feed) and other kinds of livestock production. The profitability and financial strength of a small producer is generally tied to the ability to market hogs frequently throughout the year, which lessens the impact of adverse market fluctuations. If the producer cannot market frequently, he or she probably needs to be involved in hedging practices. A corporate hog farm is usually a farrow-to-finish operation, with the number of sows ranging from 500 to as many as 100,000 for the largest producers.

Farrowing Operations

Hog breeding normally requires one boar for approximately 20 sows. Sows typically have two litters per year, and litter size is one of the most crucial factors in determining the success of a farrowing operation. Eight hogs per litter is a goal for most producers. Up to 25 percent of the sows will be culled each year. Some producers raise their own replacement sows, while others purchase quality breeding stock in an attempt to improve herd quality.

Pigs are farrowed (born) in confinement buildings, and after three weeks, they are moved to a nursery facility where the pigs are weaned from the sow. The capital invested in farrowing facilities varies greatly, but the trend has been toward higher investments in facilities that require less labor. However, a large investment in a single-use, costly hog facility can pose a significant risk if the farrowing operation is not profitable.

Feed costs are the largest operating expense of a farrowing operation. The feed required consists of a feed grain (corn or milo), a protein supplement, vitamins and minerals, and a pig starter (a commercial feed used in the transition from nursing to eating solid food). In a feeder pig production operation, the young pigs are typically kept until they weigh 40 to 60 pounds, which takes around two months. Feed costs are continually changing because of fluctuating grain prices, so it may be difficult to project cash flow accurately. Historical cash flow may be more useful in demonstrating the borrower's overall management capabilities.

Loans to farrowing operations may include an intermediate- to mid-term loan on the facilities (usually not for more than ten years), breeding stock loans that should be amortized over no more than four years, and operating loans. Operating loans are often in the form of revolving lines of credit to purchase feed, with repayment normally coming from the sale of hogs. The operating line should be cleaned up periodically, or the bank should establish systems to monitor advances and repayments to ensure that stale debt is not accumulating.

Collateral for a farrowing operation could include the facilities and the hogs and feed on hand. For collateral purposes, the hogs should be valued at local market prices even though the producer might have paid a premium for breeding stock. Feed should be heavily margined, as the proceeds from feed sale during a foreclosure are likely to be limited.

Loan repayment comes primarily from the sale of young feeder pigs and culled sows. The timing of scheduled repayments will vary, depending largely on the producer's breeding schedule and the anticipated sale dates for feeder pigs. Usually, sows are bred at different times so they are not all having pigs at the same time. In the case of a farrow-to-finish operation, the cycle will be longer, and repayments will be scheduled according to anticipated sale dates of the fat hogs and culled breeding stock.

Finishing Operations

Hog finishing is the process of acquiring young pigs that weigh 40 to 60 pounds, and feeding them until they reach a slaughter market weight of 220 to 240 pounds. The process takes approximately four months. The average death loss for a finishing operation is generally 4 to 5 percent of the total number of hogs started on feed.

Loans for hog finishing are usually in the form of single-payment notes that mature in approximately four months. Loan proceeds are used to purchase young pigs and may also be used to purchase feed. A bank commonly advances up to 100 percent of the purchase price of the pigs. Usually, there is a blanket security agreement in place that gives the bank a security interest in all hogs, as well as in feed and other chattels to provide additional overall support for the credit. Margin in the collateral increases as the animals gain weight. Repayment comes from the sale of fat hogs to a packing plant.

The main factors in determining a finisher's profitability are (1) the cost of the feeder pigs, (2) the cost of feeding the pigs, and (3) revenues from the sale of hogs. Costs and revenues continually change because of fluctuations in market prices for young pigs, slaughter hogs, grain, and feed. Because of the relatively short cycle of hog finishing, a number of loans may be made during one year. In analyzing hog loans, reviewing the overall profitability of the operation (taking into account depreciation on facilities and equipment, interest, and insurance) is more meaningful than reviewing the results from each individual loan advance.

Sheep

Sheep are raised for the production of meat and wool. The most common sheep enterprise is the raising of ewe (female) flocks, which produces income from the sale of both wool and lambs. Larger flocks tend to be more efficient as they can take better advantage of investments in labor-saving equipment.

Ewes give birth once a year, usually during late fall or winter. They frequently have twins, resulting in an overall lamb production per ewe of approximately 140 percent. About 20 percent of the ewes are culled each year, with replacements usually being raised from lambs. There is typically one ram for each 30 ewes in a breeding flock. The sheep and lambs graze on pasture during the summer and are fed a ration of roughage and grain during the winter.

Loans to ewe flock operators are made to purchase breeding stock and to pay operating expenses. Breeding-stock loans should be amortized over no more than five years. Repayment comes primarily from the sale of lambs and wool.

Typically, lambs are finished in commercial feedlots until they reach slaughter weight, which involves purchasing 60-pound feeder lambs and feeding them a hay-grain ration for about 90 days until they weigh approximately 120 pounds. The loan term is usually 90 to 120 days, with the sale of fat lambs to a processor being the source of repayment. Collateral consists of the lambs, which should be valued at local market prices. Margin required in the lambs, if any, will depend on feedstocks owned or on the borrower's financial strength.

Poultry

Poultry production has become a very large and highly organized agribusiness. Large corporate producers dominate the industry. However, they depend to a large extent on individual growers, with whom they contract to raise the birds almost from the day they are hatched until they are ready for slaughter. The large company supplies an independent grower with the day-old chicks, feed, and medications and provides technical support. Under the contract, the company pays the grower at a rate designed to provide an acceptable return on the grower's investment in poultry houses, equipment, and labor.

Producing breeding stock, incubating eggs, hatching chicks, and producing pullets and eggs are other aspects of the poultry industry that are highly specialized and relatively concentrated within fairly large corporate producers. Most banks will not extend loans on these types of operations, and any that do should have substantial background information on the industry in their files. The examiner should review that information and discuss the industry and the borrower's operation with the officer originating or servicing the credit.

The typical grower owns 60 to 80 acres of land and has an average of three to four poultry houses. Most growers also have other jobs and earn supplemental income from their growing operations. Broiler (or fryer) chickens generally are grown to a live market weight of approximately 4.2 pounds at 42 days of age.

Most bank loans to contract poultry growers consist of construction loans to build poultry houses and permanent financing for the houses and equipment. The houses are large but of relatively simple construction. Permanent financing is typically amortized over 10 to 15 years.

Government guarantees (Farmers Home Administration, Small Business Administration, or various state agencies) are often available to mitigate the bank's risk by guaranteeing from 85 percent to as much as 100 percent of the permanent loan. Federal guarantees have not been available for construction financing of poultry houses, so the bank generally will have to assume the full risk of the loan during the construction period.

Construction loans are generally converted into long-term loans that are repaid with the contract income a grower receives from the large corporate producer. Since feed and other supplies are typically furnished by the large producer, individual growers do not normally require operating loans.

Egg production for consumption (rather than hatching) is another aspect of the poultry industry; it is also highly organized and controlled by large producers. Facilities, feed, and labor represent the primary costs for these operations, with repayment coming primarily from the sale of eggs. Some income is also derived from the sale of ''spent'' hens (older hens that are no longer efficient layers). These operations are capital intensive and highly specialized. Loans to egg producers need to be carefully analyzed to determine whether they are properly structured and adequately margined. Assessment of the borrower's overall management ability, and record of profitability, industry trends, and any special risk factors is particularly important in judging loan quality.

OPERATING (PRODUCTION) LOANS

Banks (and other lenders) commonly finance the operating expenses of agricultural producers with short-term operating loans. Expenses financed may include items such as cash rent; seed; fertilizer; chemicals; irrigation; fuel; taxes; hired labor; professional fees; and, for a livestock producer, feed, feed supplements, veterinary care and medicines, and other supplies. Operating loans may take the form of single-purpose financing or line-of-credit financing. The single-purpose loan is the simplest and most basic form of financing, as it does not attempt to address the borrower's total credit requirements, and the repayment source and timing are relatively certain.

Line-of-credit financing may accommodate most of a borrower's operating needs for the production cycle. Advances are made as needed to purchase inputs or pay various expenses, with all income usually remitted to the lender to reduce the line. Depending on the type of operation, the line may seldom be fully retired because funds are advanced for a new operating year before all inventories from prior years are marketed. An operating line of credit is generally established after cash-flow projections for the year are made to anticipate credit needs and repayment capacity. While this type of financing has the advantages of convenience and accurate cash-flow monitoring (which permits comparing actual cash flow with projections), it can also have some disadvantages. The lender may be inadvertently funding or subsidizing other creditors' payments with advances on the line and, because operating cycles overlap, it may be difficult for the lender to get out of an undesirable situation.

An operating line may be revolving or nonrevolving. A revolving line replenishes itself as repayments are made, so the outstanding balance can fluctuate up and down during the approved term. There is no limit on the total amount borrowed during the term of the line, as long as the amount outstanding never exceeds the established limit. A nonrevolving line is structured so that once the approved amount is used, even though payments are made to reduce the line, the borrower must reapply and receive approval for any further advances. Revolving lines afford flexibility but have no firm disbursement or repayment plan, so they are usually reserved for borrowers with strong financial positions, proven financial management, and a history of cooperation and performance. Bank management should continually monitor operating lines and clearly document the purpose for advances and source of repayments. A clean-up period may or may not be required after harvest or completion of the operating cycle, depending on the anticipated schedule for selling farm or ranch production.

The primary source of repayment for an agricultural operating loan is revenue from agricultural production. Many farmers also receive some form of government support payments, and they may have employment off the farm or do custom work (such as harvesting) for hire. In many cases, wages or salaries generated from the nonfarm employment of a farmer's spouse will cover a significant portion of the family's living expenses, relieving the financial pressure on the farming operation. To evaluate repayment capacity, the loan officer must determine how much revenue will be generated from either current production or inventories. Revenues will need to be sufficient to cover all expenses, however, not just those funded by the loan. These could include various operating expenses, family living expenses, payments on capital debt (for real estate and equipment), and any anticipated new capital expenditures. There should also be a margin to cover incorrect assumptions about yields and prices.

Most agricultural lenders recognize the need for yearly cash-flow projections to help determine credit needs and repayment capacity. Projections of both income and expense are usually made for each month (or each quarter) of the year to anticipate the amount and timing of peak financing needs, as well as the total net cash flow for the year. Obtaining and analyzing yearly federal income tax returns (particularly Schedule F) should be strongly encouraged as a means of reviewing actual operating results. Actual data can then be compared with projections to determine variances. Reasons for the variances should be understood as a part of the credit analysis process. This analysis will help the bank decide whether to grant or deny credit and service loans.

If a borrower loses money from operations in one year and cannot fully repay the operating loan, there will be "carryover debt." In general, carryover debt should be segregated, secured with additional collateral if possible, and amortized over a reasonable term that is consistent with the borrower's repayment capacity. Consistent losses and excessive carryover debt can preclude further advances and lead to the sale of certain assets or even to full liquidation of the operation.

Collateral for a typical operating loan includes growing crops, feed and grain, livestock, and other inventories. Normally, a bank also obtains a security interest in equipment, vehicles, government payments, and other receivables to strengthen the collateral margin. For new borrowers, a lien search is recommended to determine the presence of any senior liens. Pledged assets should be valued, either by a knowledgeable bank officer or an outside appraiser, and the operation and collateral should be inspected periodically to judge conditions and values. Inspections for established borrowers are usually done at least annually. More frequent inspections are usually performed on marginal borrowers or if the borrower has a feeder livestock operation with more rapid turnover of assets.

GOVERNMENT AGRICULTURAL SUBSIDY PROGRAMS

Federal government programs have long been able to help farmers financially and, to an extent, control the overproduction of agricultural products. These programs are continually evolving, but remain important in determining many producers' income levels and profitability. In addition to establishing subsidies, the programs also set limits on the number of acres of certain crops that a producer can plant to help control crop surpluses and support price levels.

Conservation Reserve Program

The Conservation Reserve Program (CRP) is a long-term retirement program for erodible land. Landowners submit bids for a 10-year contract, stating the annual payment per acre they would accept to convert the highly erodible land to a grass cover. The maximum bid per acre has been established, and accepted bids must not exceed prevailing local rental rates for comparable land. If the bid is accepted by the local Agricultural Stabilization and Conservation Service (ASCS) office, the landowner must sow the land to grass, with the cost of planting grass shared by the landowner and the government.

During the term of the 10-year contract, the landowner cannot plant a crop on the land, allow grazing on it, or cut the grass for hay. The CRP contract is assignable, so it can be transferred to a new owner along with title to the land.

Farmers Home Administration

The Farmers Home Administration (FmHA) is a federal lending agency operating within the U.S. Department of Agriculture. The FmHA performs two main functions: (1) providing supervised credit to farmers who are unable to obtain adequate credit from commercial banks and (2) improving rural communities and enhancing rural development.

Three basic programs allow the FmHA to extend funds to farmers: (1) grants, (2) direct loans, and (3) loan guarantees. The grant program is the smallest and generally relates to rural housing and community programs, most of which are for water and waste disposal systems. The direct loan programs are for loans made by FmHA through its county and state offices to farmers. The loan guarantee program permits the FmHA to guarantee up to 90 percent of the amount of loss on a loan made and serviced by another lender.

Most FmHA loans are (1) farm-operating loans, (2) farm ownership loans, or (3) emergency farm loans. Operating loans and farm ownership loans are for operators of family farms. Eligible purposes for operating loans include capital loans for machinery and livestock, as well as annual production inputs. Farm ownership loans are available for buying land, refinancing debts, and constructing buildings. Emergency loans are designed for farmers in counties where severe production losses have resulted from a disaster or from economic emergencies.

To qualify for a loan, a borrower must (1) be unable to obtain sufficient credit elsewhere at reasonable rates and terms, (2) be a citizen of the United States, (3) be an owner or tenant operator of a farm not larger than a family farm, and (4) have sufficient training or experience to ensure a reasonable chance of success in the proposed operation.

Banks have been highly motivated to use the FmHA-guaranteed loan program as a means of mitigating risk and perhaps developing a sound customer for the future. An FmHA loan also improves the bank's liquidity, since the guaranteed portion of the loan can be sold in the secondary market.

Small Business Administration

While it is not primarily a lender to agricultural producers, the Small Business Administration (SBA) has made low-interest-rate disaster loans available to individuals, including farmers. The SBA can make or guarantee various types of agricultural loans to producers whose annual revenues do not exceed $500,000. Banks occasionally make these loans, which are supported by collateral as well as a substantial percentage guarantee by the SBA. In many rural areas, however, it is probably more convenient for a bank to work with a nearby FmHA office than with an SBA office, which may be located some distance away in a metropolitan community.

Federal Crop Insurance Corporation

The Federal Crop Insurance Corporation, which is a part of the U.S. Department of Agriculture, writes multiperil crop insurance. The premiums for this insurance are subsidized by the federal government. For further information, see the following subsection on crop insurance.

CROP INSURANCE

The Federal Crop Insurance Reform Act of 1994 combined crop insurance and disaster aid into a single, unified program. To be eligible for any price support or production adjustment program and for new contracts in the conservation reserve program or any FmHA loan, farmers must carry crop insruance coverage. The expanded crop insurance program replaces the need for disaster bills as the federal response to emergencies involving widespread crop loss.

Aside from the basic required coverage under the federal program, known as the catastrophic coverage level, banks encourage some borrowers to carry crop insurance to reduce their risk of not being repaid on farm-operating loans. Borrowers that are more highly leveraged and have minimum margin in their operating loans are most likely to be required to carry crop insurance. Two common types of crop insurance are (1) crop hail insurance sold by private insurers, which insures only against hail damage, and (2) multiperil crop insurance written by the Federal Crop Insurance Corporation. As its name implies, multiperil crop insurance insures against drought, rain, hail, fire, wind, frost, winterkill, disease, and insect losses.

The federal government subsidizes the multiperil crop insurance premium by paying most of its administrative, actuarial, underwriting, and selling expenses. By subsidizing premiums and encouraging more producers to purchase the insurance, the government hopes to reduce the dependency on crop disaster payments when natural disasters occur. However, this program has not been particularly popular with farmers because they would have to suffer a high level of losses on all planted acres to receive any significant proceeds from the insurance. By diversifying their crops and planting in fields that are separated by significant distances, many farmers are willing to risk planting without crop insurance.

EVALUATING AGRICULTURAL MANAGEMENT

A crucial factor in loan analysis for banks, as well as for examiners, is an evaluation of the management capabilities of the agricultural producer. Cash earnings from an operation provide the primary source of repayment for most agricultural loans, so it is important to evaluate the borrower's ability to manage a profitable operation. The three kinds of management that agricultural lenders most often analyze are production, marketing, and financial management.

Production Management

A lender should first assess the borrower's technical ability as a producer of crops or livestock. This is primarily an objective measure because it consists of comparing an operation's output against industry and area norms. An operator whose production levels are consistently below average will probably have difficulty meeting debt-service requirements and may not be able to stay in business. There may be justifiable reasons for occasional years of below-average production, but lenders should be cautious of operators who consistently perform poorly.

Another factor to consider is the producer's ability to successfully cope with the inherent variability of agricultural production. Adverse weather, disease, and pest infestations are all production risks that continually affect crops and livestock. Some producers diversify the commodities they produce to reduce their dependency on one crop or type of livestock.

Marketing Management

Good marketing management enables the producer to reduce price risk exposure. Volatile markets have convinced most producers and lenders that sound marketing is crucial for an ongoing agricultural operation, and almost every producer needs a marketing plan designed to control price risk. Aside from helping to ensure profitability, the plan can be incorporated in formulating a more reliable statement of projected cash flow, which helps both the lender and producer anticipate financing needs.

Some of the techniques that producers use to manage price risk exposure are forward contracting, hedging, purchasing options, and using government programs. See the subsection "Marketing Farm Products" for details.

Financial Management

A producer should have the ability and willingness to understand, maintain, and use financial records. The importance of sound financial records began to be more fully appreciated in the 1980s when agricultural loan losses rose, and many agricultural producers and banks failed. During that time, the primary emphasis for many agricultural lenders shifted from collateral-based lending to cash-flow lending. While collateral may afford ultimate protection for the lender under a liquidation scenario, cash flow allows for repayment of debt in the normal course of business.

In addition to recordkeeping, financial management also encompasses how a producer uses his or her assets and liabilities. Maintaining financial reserves in the form of current assets is one means by which a producer can be prepared to overcome short-run adversity. The reserves need not necessarily be cash; they might be in the form of stored grain or other nonperishable produce or they could be earning assets such as livestock, which is readily marketable. Controlled, reasonable equipment purchases are another indication of good financial management. Overspending on equipment may be indicated if the borrower's equipment list includes many items that are new, especially costly, duplicative, or unneeded for the types of operations being conducted. The presence of sizable nonbank equipment debt on the borrower's financial statement can, in some cases, also reflect overspending.

MARKETING FARM PRODUCTS

Marketing considerations have become more important for many producers as they attempt to maximize returns. Rather than merely selling crops or livestock at prevailing market prices when the production cycle is complete, some producers attempt to lock in a price through the use of forward contracts or futures or options trading. Some producers of nonperishables may simply study market action and cycles and keep harvested crops in storage, waiting for higher prices. Some livestock producers may buy and sell throughout the year to help even out the effects of market fluctuations. Both the bank lending officer and the borrower need to have a clear understanding of the marketing plan, including its potential costs, benefits, and risks.

The following comments briefly describe some of the basic tools producers use as alternatives to the cash market to manage price risk.

- *Forward contracting*. The producer contracts with a buyer to sell farm products at a fixed price in advance of the actual marketing date. These contracts are simple to use if willing buyers can be found, but carry some risk of the buyer's defaulting, particularly if market prices decline significantly before the contract matures. This risk may be mitigated to some extent by requiring the buyer to provide security in the form of a 10 to 15 percent margin to help ensure that the buyer honors the contract.
- *Minimum-price forward contract*. This is a relatively new type of forward pricing that may be available to some producers. It establishes a floor but not a ceiling for the price the producer will receive for his commodities, so

it protects against price declines but permits the producer to garner additional profits if the market rises.

- *Basis contracting*. This is a variation on forward contracting, whereby the price the producer receives is not fixed when the contract is drawn, but will be determined by the futures market price plus or minus some agreed-on difference (basis). For example, cattle for September delivery might be priced at the September futures price (as of a date to be selected by the seller) plus 50 cents per hundredweight. Accordingly, a basis contract does not reduce risk until the price is set by the seller, so if the seller waits to set the price, he or she is still subject to all market risk. However, a basis contract can be combined with a put option (see below) to set a minimum price.
- *Hedging*. Hedging involves the use of counterbalancing transactions to substantially eliminate market risk. The type of hedge typically used by an agricultural producer is sometimes referred to as a ‘‘short hedge’’ because it involves use of the futures market to, in effect, sell short. Later, when the producer's commodities are ready for delivery, he sells them in the cash market. If the price has declined, he makes a profit on the sale of the futures contract to offset the lower price he receives in the cash market. Conversely, if the price has increased, a loss on the futures contract will be incurred to offset the gain in the cash market. Hedging is similar to fixing a price with a forward contract except that the price is said to be an ‘‘expected’’ fixed price, since the difference between the cash and futures prices may not be correctly anticipated and the resulting net price received will vary some from the expected level. Hedging can have an advantage over forward contracting because it is readily available and based on competitively determined futures prices. Since positions in the futures market require the producer to keep a cash margin with the broker, and additional margin calls may have to be met if the market goes up (after the producer has sold short), it is especially important that the bank loan officer be aware of and understand the borrower's marketing plan.
- *Put option*. Buying a put option gives the producer the right, but not the obligation, to sell a commodity at a given (strike) price any time before the put's expiration date. It protects against falling prices because the put becomes more valuable as prices fall. At the same time, a put allows the producer to benefit from rising prices, if they rise more than enough to cover the cost of the put. Puts can also be attractive because they can limit losses by establishing a minimum price at times when current prices are not profitable and the producer is reluctant to fix a low price with forward contracting or short hedging. Puts have the disadvantage of being more expensive than hedging; premiums for put options can be especially high when market prices are high.

Other more complex strategies are sometimes used that combine cash and futures instruments to minimize risk or to modify initial positions to adjust for changing market conditions, including the following.

- *Establishing minimum prices with basis contracts*. Purchasing a put option along with selling commodities on a basis contract establishes a minimum price, while allowing the producer to gain from rising prices.
- *Converting a fixed price into a minimum price*. If a producer accepts a fixed price via forward contracting and later regrets that decision, he or she may decide to purchase a call option (which becomes more valuable as prices rise). The combination of a fixed-price contract and a call option is called a ‘‘synthetic put’’ because the net effect is the same as buying a put option. The producer who has accepted an estimated fixed price via a short hedge can either lift the hedge (cover the open short sale in the futures market) or, depending on circumstances and relative costs, leave the hedge in place and purchase a call option.
- *Converting a minimum price into a fixed price*. If a put option has been used to set a minimum price at very low levels, and prices subsequently increase, the producer can either roll up the put to a higher strike price or sell futures and establish a fixed price when the market reaches an acceptable level. Buying one or a series of additional puts allows the producer to profit from a further rising market but may become expensive.

FINANCIAL AND INCOME INFORMATION FOR AGRICULTURAL PRODUCERS

The financial and income information most commonly used by agricultural lenders includes balance sheets, income tax returns, and statements of projected cash flow. Many producers do not prepare income statements on an accrual basis. Often, their only available income statement is Schedule F of the annual federal income tax return.

Balance Sheet

Balance sheets for agricultural producers usually divide assets and liabilities into three groups—current, intermediate, and long-term—based on the liquidity of assets and repayment schedules of liabilities. Current assets are those that will either be depleted within 12 months or can easily be converted to cash without affecting the ongoing business operation. Current assets include cash, accounts receivable, livestock held for sale, inventories of crops, feed, supplies, growing crops to be harvested within 12 months, and prepaid expenses.

Intermediate assets support production and may be held for several years. Principal intermediate assets include breeding stock, equipment, and vehicles. While these assets may be relatively liquid, their sale would seriously affect the productivity of the operation.

Long-term, or fixed, assets are more permanent in nature and benefit the operation on an ongoing basis. The principal fixed asset of an agricultural operation is farm real estate, although the producer may have other long-term assets, such as investments, which may or may not be related to his or her farming or ranching operation.

Current liabilities include those which must be paid within 12 months, including amounts owed for feed, seed, supplies, interest, and taxes. The amounts of any payments due within 12 months on intermediate-term and long-term debt should also be included in current liabilities.

Intermediate liabilities are generally those due between one and ten years from the statement date, and commonly represent debt to finance equipment and vehicles. As mentioned above, the amounts of payments due on these debts within 12 months are shown as current liabilities.

Long-term liabilities usually are those that, at inception, had a maturity of more than ten years. Debt on real estate is the main type of long-term liability on the balance sheets of most agricultural producers.

The difference between total assets and total liabilities is the net worth of the producer or the equity in the producer's assets. Most producers are individual or family farmers whose balance sheets also include personal assets not directly used in the operation, as well as debts owed on those items.

It is important to remember that the amount shown on the statement for net worth is subject to question. Since it is merely the difference between the amounts shown for total assets and total liabilities, its accuracy depends on how the assets are valued and whether all liabilities are reflected. Most agricultural borrowers value assets on their balance sheets at what they assume to be "market value." However, some tend to use rather optimistic valuations, particularly on items such as equipment and real estate. Also, some borrowers tend to carry the same values forward each year for real estate or equipment, which may cast some doubt on accuracy. Examiners reviewing agricultural credits should try to determine prevailing market prices for various types of land in the bank's trade area and acquire general knowledge of equipment values. Recent published sales data on both real estate and equipment provide reliable indications of current values.

Sometimes not all liabilities are fully or properly disclosed. A form of potential liability that is often not disclosed is the amount of deferred income tax that will be due on the sale of real estate in which the borrower may have a substantial unrealized capital gain. It may not be possible to readily estimate such deferred-tax liability unless the borrower's statement shows both cost and market values. However, the examiner should keep these points in mind in analyzing the balance sheet, in an attempt to accurately assess the borrower's financial strength. Comparison with previous balance sheets, other information in the loan file, and general knowledge about values will aid the examiner in this analysis.

It is advisable to determine how the balance sheet was prepared and by whom. Many are prepared by the borrower and submitted to the bank. Others may be prepared by the borrower and lending officer working together. Presumably, the latter method would tend to ensure a more accurate presentation but, if not, it could raise questions about lending practices or the lending officer's competency. Similarly, balance sheets that do not balance (not an unusual occurrence) might indicate a lack of appropriate analysis by the lending officer.

Balance-Sheet Ratio Analysis

The following are some basic, fairly simple ratios that can indicate the financial strength of a producer.

- *Current ratio (current assets/current liabilities)*. This ratio can reflect a borrower's ability to meet current obligations without additional borrowing.
- *Quick ratio (liquid assets/current liabilities)*. This ratio compares current assets that are easily converted into cash with current obligations and reflects a borrower's ability to immediately meet current obligations.
- *Leverage ratio (total liabilities/net worth)*. This ratio shows the relationship between borrowed capital and owned capital. The higher the ratio, the greater is the reliance on borrowed capital, which means higher interest expense, potentially lower net income, and certainly less equity cushion to withstand risk and adversity. This is often called the *debt-to-worth ratio*.

Ratio Interpretation Guidelines[3]

Ratio	*Low Risk*	*Moderate Risk*	*High Risk*
Current Ratio	1.5:1	1:1–1.5:1	<1:1
Quick Ratio	1.1:1	.8:1–.5:1	<.5:1
Leverage Ratio	.75:1	1:1	1.25:1

Income Statement

Determining actual profitability for most agricultural borrowers is difficult, primarily because of the absence of complete income and expense information on an accrual basis. The most common income statement for agricultural producers is Schedule F of the federal income tax return (''Profit or Loss from Farming''), which accompanies Form 1040. It is prepared on a cash basis, showing cash income received and cash expenses paid, although the taxpayer is also permitted to deduct depreciation expense for items such as equipment, improvements to real estate, and breeding stock. Farmers may have other farm-related income reported on Form 4797, which reports sales of dairy and breeding livestock, or on Schedule D, which shows sales of real estate and equipment. Additional nonfarm income is reported on page 1 of Form 1040. All sources of income need to be considered by lenders and examiners, but for most farm borrowers, Schedule F is the primary report of income for the farming operation.

Tax returns probably provide the most accurate income and expense information for most farm operations. Some lenders attempt to convert the cash basis Schedule F to an accrual basis by adjusting for changes in inventory values, receivables, payables, and similar items, but the process requires timely, detailed financial information that often is not readily available. Instead, many lenders and examiners look at cash-basis income over a three-to-five year period to analyze trends and even out the cash-flow variances caused by differences in production and marketing cycles.

While cash income is not necessarily a good measure of farm business profits, it does help show the cash-flow situation and is useful in planning debt repayment programs and family budgets. In addition, cash income statements can be compared with projected cash flows to determine variances that need explanation or that may indicate the need for changes in the operation.

Operating Ratio Analysis

Key ratios can be calculated from income statements to aid in analysis. The most commonly used ratios measure profitability, repayment ability, and efficiency. Profitability is usually determined by return on equity and return on assets. Repayment ability can be determined by the earnings coverage ratio and debt payment ratio. The most common economic efficiency ratio used is the operating expense to revenue ratio. Although many smaller banks have not used income statements to any extent to analyze agricultural credits, this type of analysis can provide useful insights into an operator's efficiency and repayment ability.

3. These ratio interpretation guidelines are only rules of thumb and need to be viewed in conjunction with a thorough analysis of other pertinent factors, including balance-sheet composition, the nature of the operation, and an assessment of the borrower's management ability.

Return on assets is usually calculated by adding interest expense to net farm income and deducting a management fee (usually an amount for unpaid family labor), then dividing the resulting figure by average total farm assets for the year. Return on equity is usually calculated by deducting a management fee or unpaid family labor from net farm income and dividing the difference by total farm net worth.

Common ratios used to assess debt repayment ability and repayment risk are the earnings coverage ratio and the debt payment ratio. The earnings coverage ratio (also known as the cash-flow ratio) is a measure used to assess the operation's ability to repay. A strong earnings coverage ratio would be 30 percent or above. An acceptable but riskier level would be 10 to 30 percent. The debt payment ratio is used to determine risk over the term of the loan. It is calculated by dividing total annual debt payments by total revenue. As a general rule, total principal and interest payments should not exceed 25 percent of total revenue. A ratio of less than 15 percent would be relatively safe, while a 15 to 25 percent range would indicate some degree of risk.

The operating expense to revenue ratio measures the operating efficiency of the farm exclusive of debt obligations. A ratio of less than 70 percent usually reflects an efficient manager who can service larger amounts of debt. If the ratio exceeds 80 percent, repayment problems could occur if large amounts of debt are outstanding. The ratio tends to be higher for smaller operations.

The following example shows how the earnings coverage, debt payment, and operating expense to revenue ratios are determined from the income statement. This example reflects generally adequate ratios.

1. Total farm revenue	$210,000
2. PLUS: Nonfarm revenue	22,000
3. Total revenue (line 1 + line 2)	232,000
4. LESS: Farm operating expenses (excluding interest and depreciation)	153,000
5. LESS: Family living expenses and income taxes	35,000
6. Earnings available for interest and principal payments and new investments	44,000
7. LESS: Interest and principal payments	32,500
8. Remaining earnings available for risk, uncertainty, or new investments	11,500

Earnings coverage ratio = line 8 divided by line 7	35%
Debt payment ratio = line 7 divided by line 3	14%
Operating expense to revenue ratio = line 4 divided by line 1	73%

Statement of Projected Cash Flow

Projecting cash flow for an agricultural operation gives recognition to the importance of cash flow in servicing the debt of an ongoing operation. It also tends to impose some discipline on both borrower and lender by requiring a thoughtful planning process for the year in terms of anticipated income, expenses, financing needs, debt-servicing requirements, and capital expenditures. For individual or family farm operations, family living expenses should be included in the projections, as well as nonfarm income.

A cash-flow statement typically shows both the timing and amount of cash receipts and expenses. It can be either a forecasting device (statement of projected cash flow) or historical record (statement of actual cash flow). Banks and other lenders most commonly use the statement of projected cash flow because it aids in planning the borrower's credit needs, usually for the coming 12-month period.

A statement of projected cash flow shows not only how much credit is likely to be needed, but approximately when it will be needed. Perhaps most importantly, it shows whether cash income is expected to exceed expenses for the year. It also indicates the likely high point of the credit (amount and time) and the expected cash or debt position at the end of the year. The projected cash-flow statement represents a kind of budget that provides benchmarks against which actual performance can be compared. Significant variances call for explanations and may prompt certain actions to improve future operating results. Historical statements of actual cash flow have value for comparative purposes and can be an excellent aid in preparing projections for the following year, although banks do not typically request them from most agricultural borrowers. They tend to rely, instead, on income tax returns for information on actual operating results.

Cash flow projections are usually made near the beginning of a calendar year, although timing can vary depending on the nature of the operation. The statement is prepared as a spreadsheet normally listing, by month, anticipated cash receipts and disbursements. For each period, the projected operating-loan balance is shown after adjusting for the amount of projected net cash flow.

AGRICULTURAL LOAN POLICIES

Not all banks make agricultural loans, but for many banks, these loans comprise a significant portion of their portfolios. Any bank making agricultural loans should have developed an adequate, formalized set of written policies to guide the lending officers and staff. Agricultural loan policies should address the same general considerations as the policies used for other loan categories, such as desirable, undesirable, or prohibited loans; collateral requirements (including evaluation guidelines); maximum loan-to-value ratios; maximum maturities; documentation requirements; and concentration limitations. Given the specialized nature of agricultural assets and the varied types of operations, the policies should be comprehensive and specifically address the types of agricultural loans the bank intends to make.

Some banks may have general policies, supplemented by separate procedures or practices. Regardless of the individual bank's terminology or the way in which the material is organized, it is important that the bank's board of directors ensure that appropriate written guidance is provided for management in the agricultural lending area. The policies should help ensure that loans are made on a sound basis and provide a framework for identifying, addressing, and resolving problems that arise. Loan grading, either by the loan officers, a separate loan review function, or both is desirable, as well as a general plan for actions to be taken on loans with unsatisfactory grades. The policies should also address collection and charge-off considerations. Agricultural loan policies should be reviewed by the bank's board of directors and modified when deemed necessary. For more detailed guidance on bank loan policy, refer to section 2040.1, ''Loan Portfolio Management.''

AGRICULTURAL LOAN DOCUMENTATION

Loan documentation establishes the bank's legal position as creditor and secured party and evidences the borrower's ownership of and actual existence of collateral. Some documents, such as an insurance policy, give some evidence of collateral values and ensure that tangible collateral is protected. A number of documents play a supporting role, as they provide information that is vital in assessing a borrower s creditworthiness and in demonstrating the borrower's financial capacity to regulatory authorities, auditors, loan reviewers, senior management, and the board of directors. The documents also help management to service and grade the credit, determine the nature and extent of any problems, and formulate plans to resolve them by strengthening the bank's position or averting losses.

Absence of complete and current loan documentation is a weakness in the lending function and can pose a significant threat to the bank's safety and soundness. Some documentation exceptions are noted during virtually every examination, largely due to inadvertent oversights or unavoidable delays in obtaining original or updated documents. However, an unusually large volume of exceptions can be an important indication of weak and deteriorating loan quality. Excessive exceptions reflect unfavorably on management and indicate a need for management to either formulate stronger loan policies and procedures or to emphasize adherence to established guidance.

Many banks use a standard checklist to help ensure that all applicable documents are obtained when a loan is made. Most banks also have either an automated or manual ''tickler'' system to identify when updated documents are needed, such as current financial statements, tax returns, UCC-1 filings, collateral inspections, and evidence of insurance. Because of the large volume of required documents, many of which need to be updated at least annually, it is imperative that bank management be firmly committed to a sound loan documentation program. The program should establish responsibility for obtaining documents, monitoring compliance, and providing follow-up to help ensure that all required documents are obtained in a timely manner.

Not every document is applicable to each agricultural loan. Examiners need to assess which documents are appropriate for a given loan depending on its individual circumstances. There should be little disagreement between examiners and bank management about the basic documents needed. Basic documentation requirements are usually listed in the bank's loan policies or procedures. The need for certain supporting documents may be a matter of judgment, particularly in regard to frequency of updating documents. In most cases, however, bankers and examiners tend to agree on items that are to be considered documentation exceptions. Refer to section 2080.1, ''Commercial and Industrial Loans,'' for further guidance on loan documentation. Following is a list of the types of documents a bank should have in connection with agricultural loans:

- promissory note
- security agreement
- financing statement
- real estate mortgage or deed of trust
- other collateral assignments, as appropriate (such as assignments of third-party notes, mortgages or deeds of trust, life insurance policies, deposit accounts, securities, or other contracts)
- subordination agreements (for example, a prior lienholder may subordinate its lien position to a bank to induce the bank to make a loan)
- appraisals
- hazard insurance policy or certificate of coverage
- cash-flow projections, usually prepared annually
- income tax returns
- financial statements (balance sheets) for the borrower, cosigner, or guarantor
- collateral inspection reports by the bank
- bill of sale for livestock or equipment
- worksheet for each note (showing the purpose, timing, and source of repayment; collateral; total existing bank debt; analysis)
- overall credit analysis (particularly on large or troubled loans)
- loan officer memos and comments
- correspondence

LOAN ADMINISTRATION AND SERVICING

In addition to making agricultural loans, analyzing creditworthiness, setting loan terms, obtaining collateral, and assembling required documentation, management needs to administer the portfolio of outstanding loans. They need to monitor borrowers' performance relative to agreed-upon terms, collateral margins, financial and income data, cash flow, crop prospects, and market trends that may affect borrower performance. If problems arise, bankers need to formulate and implement plans to protect the bank's position.

Farm and Livestock Inspections

A physical inspection of the farming operation is usually performed by bank management before advancing any substantial funds to a new borrower. Subsequent inspections, particularly for larger or more marginal borrowers and for readily moveable collateral, should be performed periodically. Inspections may be performed by the loan officer or by another bank officer or employee with agricultural experience. The inspector usually prepares a fairly detailed report listing farm assets (livestock, equipment, grain and feed on hand, and growing crops) and at least brief comments on the condition of assets and crop prospects. Often, a listing of machinery, equipment, and vehicles is prepared from the bank's records ahead of time to aid in the inspection process; any additions, deletions, or exceptions noted should be shown on the report. Livestock are listed by type, showing numbers, sex, and approximate weight. Values for all items should be shown on the report, based on current market prices. The report may note the number of acres the potential borrower owns and rents, as well as the approximate value of real estate owned. A real estate evaluation might be performed as part of a farm inspection, but a full appraisal, if required, would almost always be performed separately, usually by another individual.

Farm inspections are usually performed annually, unless the borrower has a livestock feeding operation or some other type of operation that involves frequent turnover of assets. Generally, it is desirable to inspect feeder operations approximately every six months or more frequently if deemed necessary. The absence of a current inspection report, especially for larger or troubled borrowers, may be considered a loan-documentation exception.

UNSOUND AGRICULTURAL LENDING PRACTICES

Following is a list of common unsound lending practices, some of which are general and apply to all types of loans while others relate more specifically to agricultural loans. This list includes the most common shortcomings. Depending on the extent of the unsound practices, the examiner should incorporate specific recommendations for improvement into the examination report or formal supervisory action where appropriate.

- absence of or failure to follow sound lending policies and procedures
- failure to require adequate performance on debt
- failure to monitor the borrower's performance and position, commonly evidenced by the—
  - —lack of periodic collateral inspections
  - —absence of current income and financial information
  - —failure to consider the borrower's total debt-service requirements
  - —presence of additional operating debt at another bank; or
  - —absence of a lien search to verify the bank's position in collateral
- inappropriate loan structuring, such as—
  - —untimely or inappropriate repayment schedules
  - —failure to identify or segregate carryover operating debt
- unwillingness to say ''no'' to a financially stressed borrower, which could be an indication of—
  - —overlending (building loan volume without regard to quality or long-term effects on the borrower and the bank)
  - —failure to consider borrower's management capabilities
  - —failure to analyze or project costs of production
  - —failure to observe market trends.
- lending for speculative purposes
- lending outside of the bank's normal trade area
- lending on new or unproven types of operations or operations in which bank management has little or no experience

TROUBLED AGRICULTURAL LOANS

Aside from readily identifiable problem loans such as past-due loans, loans on nonaccrual status, loans on the bank's watch list or those that were previously classified, or loans to borrowers who have filed for bankruptcy, the following characteristics may indicate existing or potential problems. Examiners should keep in mind both current conditions and trends.

- undermargined collateral position
- unusually high leverage
- marginal liquidity
- heavy investment in equipment, vehicles, or real estate
- need for unplanned credit advances
- deficiencies or problems revealed in the collateral inspection
- unfavorable financial trends (especially increasing debt-to-worth ratio or declining collateral margins)
- lack of performance (renewals without appropriate performance)
- capitalizing interest on debt
- charge-offs
- inability to meet scheduled debt payments
- tax problems
- reluctance of borrower to provide current, complete, and accurate financial information
- notification of insurance cancellation for failure to pay premium
- evidence of legal action against the borrower
- overdependence on guarantors
- overdependence on anticipated inheritance

CHAPTER 12 BANKRUPTCY

Chapter 12 bankruptcy for family farmers became effective in November 1986. It was designed specifically for the family-farm debtor and permits family farmers to reorganize farm debt so that the amount of the debt approximates the value of the collateral. Only a ''family farmer with regular annual income'' (which can be a partnership or corporate structure) may file a chapter 12 bankruptcy. To be eligible, a debtor must meet *all* of the following tests:

- have a farming operation
- have no more than $1.5 million in total debts
- derive at least 80 percent of total debts (exclud-

ing debt on the principal residence) from the farming operation

- derive more than 50 percent of the family's income from the farming operation during the year immediately preceding the filing

The family farmer will have regular annual income if the court finds the annual income to be sufficiently stable and regular to enable the farmer to make payments under the chapter 12 plan.

Under chapter 12, there is no requirement for accelerated payment of arrearage as there is with chapter 13. Instead, the farmer/debtor can commence making plan-required payments from the start of the chapter 12 bankruptcy. Also, a farmer/debtor will have the ability to modify a promissory note and continue payments on it beyond the life of the chapter 12 plan if the court approves the modification; in such cases, the creditor cannot object.

A secured creditor will be ''adequately protected'' during the chapter 12 bankruptcy if it receives cash payments to offset any decrease in the value of collateral and, in the case of farmland, if the creditor is paid a reasonable rental fee based on the earning capacity of the property. Also, chapter 12 does not allow the creditor to recover ''lost opportunity costs,'' so the creditor will not be entitled to interest and other gains that would have been received by the creditor had bankruptcy not been filed. Elimination of the lost-opportunity-cost provision makes it more difficult for creditors to obtain a lift of stay on the grounds that there is not adequate protection.

Before confirming the chapter 12 plan, a court may permit a farmer to sell pledged assets without the consent of the secured creditor, although proceeds from the sale must go to the secured creditor. Creditors may bid at the sale, and collateral that is not sold will be subject to current evaluation in determining what amounts will be claimed by secured creditors under the plan. There is no time limit on the duration of a chapter 12 plan, except for a three-year limit (or five years with court approval) on unsecured debts.

If a chapter 12 debtor voluntarily dismisses the case, he is prohibited from refiling for 180 days. The law also provides for a dismissal from chapter 12, or a conversion to chapter 7, when the debtor commits fraud. Any other provisions of chapter 12 that are not discussed here are generally similar to those in chapter 11 and chapter 13 bankruptcy proceedings.

WORKING OUT PROBLEM AGRICULTURAL LOANS

When significant problems arise in agricultural credits, bank management resolves the problems in a timely manner to protect and strengthen the bank's condition. A sound and accurate loan-grading system, supported by a competent internal loan review program, will help to ensure timely identification of problems. Regulatory examinations provide an independent assessment, which may identify additional problems that management has not recognized. Once problems are identified, the following considerations are important in a workout program:

- identify the source of the problem
- establish a workout plan designed to strengthen the borrower and to minimize loss to the bank
- set at least a tentative timetable for the workout
- reach agreement with the borrower on the plan, if possible
- monitor progress frequently

Alternative actions in a workout plan might include—

- reducing the bank's exposure in outstanding debt by—
  - —obtaining additional collateral,
  - —obtaining financial assistance through sound cosigners, guarantors, or government guarantees,
  - —encouraging the borrower to modify his operations, or
  - —restructuring the credit to reduce the interest rate or payments
- advancing more funds to—
  - —refinance existing nonbank debt on more favorable terms or
  - —improve the bank's overall collateral position (for example, take out a small balance to a senior lender to put the bank in a first lien position)
- reducing or eliminating outstanding bank debt by—
  - —selling assets, which can range from a partial sale to reduce debt burden and improve chances for survival to a complete liquidation;

—refinancing a portion of bank debt (such as real estate) elsewhere if more favorable rates or terms are available; or
—recognizing a loss by partial or complete charge-off of the credit.

EXAMINER REVIEW OF AGRICULTURAL LOANS

A review of agricultural loans during an examination will follow the same basic guidelines employed in reviewing commercial or real estate loans. Certain practices, types of collateral, and documents may be unique to agricultural loans, and credit analysis will be somewhat specialized. However, the objectives of assessing credit quality based on the borrower's financial strength, cash flow, collateral, history of performance, and indications of management capabilities are much the same as for other loan types.

Sample size and sampling techniques will vary with the planned scope of the examination and size of the bank and its agricultural loan portfolio. As a minimum, the examination scope would usually include past-due and nonaccrual loans, watch-list loans, previously classified loans, insider loans, and some portion of other loans. See section 2080.1, ''Commercial Loans,'' for details regarding this topic.

Classification of agricultural loans should be made using the same criteria established for other types of loans. See section 2060.1, ''Classification of Credits,'' for regulatory definitions of substandard, doubtful, and loss classifications, as well as the special mention category and guidance on classifying loans.

Agricultural Loans
Examination Objectives
Effective date May 1996

Section 2140.2

1. To determine if lending policies, practices, procedures, and internal controls for agricultural loans are adequate.
2. To determine if bank officers are operating in conformance with the established guidelines.
3. To evaluate the agricultural loan portfolio for credit quality, performance, collectibility, and collateral sufficiency.
4. To determine the scope and adequacy of the audit function.
5. To determine compliance with applicable laws and regulations.
6. To initiate corrective action when policies, practices, procedures, objectives, or internal controls are deficient or when violations of laws or regulations have been noted.

Energy Lending—Production Loans

Effective date May 1996

INTRODUCTION

This section is intended to provide guidance to examiners reviewing small, noncomplex production loans, usually to small independent oil and/or gas operators. The examination of a loan to a small oil or gas operator is considerably different from the examination of most commercial loans, and is similar in some respects to examinations of real estate loans. The only asset that many small independent operators have is oil or gas in the ground or both. Loans to operators are based solely on the predicted cash-flow value of the oil or gas production. Therefore, a production loan is a loan secured by interests in oil and/or gas production properties. Cash flow generated from the future sale of encumbered oil and/or gas reserves is the primary, and in some cases, the only credible source of repayment. Therefore, production payments are usually assigned to the bank, and the liquidation value of collateral is expected to be sufficient to pay off the loan at any time. In considering this or any type of secured loan, the banker will determine or judge the character, capacity, credit history, and other credit factors related to the borrower. Also, the bank must determine that the operator of the properties is capable and dependable.

Because cash flow generated from the future sale of oil or gas is the justification or basis for production lending, only proved-producing reserves are acceptable collateral for a bank because they provide sufficiently predictable cash flow for debt service. For this reason, loan values are predicated primarily on reserves that are proved-developed-producing properties.

DEFINITIONS OF RESERVES

Reserves are classified into one of three categories: proved, probable, or possible, with proved divided into three subcategories.

Proved Reserves

- *Proved-developed-producing.* These wells have been drilled and completed, and are producing oil or gas.
- *Proved-developed-nonproducing.* These are generally proved-developed reserves behind the casing of existing wells or at minor depths below the present bottom of such wells that are expected to be produced through these wells in the predictable future. The development cost of this type of reserves should be relatively small compared with the cost of a new well.
- *Proved-undeveloped.* These are reserves that are proved resources to be recovered from new wells on undrilled acreage or from existing wells requiring a relatively major expenditure for recompletion.

Probable Reserves

- *Probable reserves.* These reserves might include those expected to be producing from existing or planned wells in areas anticipated to be economically beneficial, based on geological or seismic data.

Possible Reserves

- *Possible reserves.* These reserves include those whose existence may be inferred from geological considerations, including potential reserves from planned waterfloods or other recovery techniques that have not been proved.

EVALUATION OF RESERVES

When a lender decides to proceed with financing secured by oil or gas reserves, an engineering report will be obtained. The initial step to determining the loan value of the collateral or assessing the creditworthiness of a production loan is an analysis of the engineering report. Banks that make production loans will usually have a petroleum engineer on staff or contract with an engineering consultant firm to provide an engineer's report on the properties to be pledged. Basically, the engineering report consists of determining reserves and production forecasts and then applying the pricing and costs to arrive at the net lease operating income available for debt service. This report is comparable to a real estate appraisal in its importance and function.

The following table is a very simple presentation compared with the typical evaluation of oil and gas properties in an engineer's report. Typically, most reports will detail five or more years with the last row including all remaining years. Production is usually broken down into categories of oil and gas, and sometimes the number of wells is detailed. Expenses may be divided into major components such as operating costs; production and ad valorem taxes; depreciation, depletion, and write-off of intangibles; general and administration expenses; and taxes on income. Also, if the owner expects to make capital improvements from income, a column may be added for that factor. Some reports include the pro forma amount and terms of the loan to aid the analysis.

Engineering reports must be generated by a fully qualified petroleum engineer. The lender must have complete confidence in the engineer's ability and intellectual honesty, as well as in the quality of the data and its susceptibility to analysis. The integrity of engineering data that depict future cash stream is critical to the initial lending decision and equally important to an examiner in the assessment of credit quality. In summary, an acceptable engineering report must be an independent, detailed analysis of the reserves prepared by a competent engineer. The examiner should carefully review the following three elements.

Pricing

The value assigned to production and expenses must be realistic. Operating costs are based on what similar operations in similar areas have been or, in the case of producing reserves, on historical performance, which may be escalated at some reasonable percentage each year. The report should consider increases and decreases in price as well as cost inflation over the "life of the properties." The future price of oil is a judgment factor and should be based on conservative pricing and can include some reasonable escalation each year. This information can be obtained from a number of reliable sources, and the examiner should determine the source to judge the reliability of report information. The prices used for gas are usually contract prices plus escalation-clause rates. Special care is necessary in evaluating gas contracts, including their reasonableness in light of current conditions and the ability and willingness of the purchasers to honor the contracts. In some instances, certain purchasers have broken contracts or exercised "market-out" clauses to cease complying with long-term purchase commitments. The Securities and Exchange Commission requires reserves with renegotiable contracts or under market-out clauses to value the reserves at spot prices at the date of renegotiation or immediately, in the case of market-out clauses.

TABLE 1
ENGINEER'S REPORT—EVALUATION OF OIL AND GAS PROPERTIES

Year	*Production $18 per Barrel (bbl)*	*Future Income*	*Operating and Other Expenses*	*Future Net Income*	*Present Worth (PW) Future Income @10%*	*PW Future Net Income @10%*
1	5,000	$ 90,000	$10,000	$ 80,000	$ 85,800[1]	$ 76,300
2	4,000	72,000	8,000	64,000	62,400	55,500
3	3,000	54,000	7,000	47,000	42,600	37,000
4	2,000	36,000	6,000	30,000	25,800	21,500
5	1,000	18,000	5,000	13,000	11,700	8,500
Total	15,000	$270,000	$36,000	$234,000	$228,300	$198,800

1. For present-worth calculations, usually ½ year is used for the first period, 1½ for the second period, and 2½ for the third period, and so on.

Present Worth

Present worth is used to recast future income into the equivalent dollar value today; it should reflect current market interest rates. The present worth of future net revenues is used to help determine the maximum amount that can be loaned.

Timing

Preferably, the report should be no more than six months old. A report that is up to 12 months old may be acceptable in some cases; however, it should not be more than 12 months old. Change is the most important factor in determining the adequacy and timeliness of reports. Recent significant price fluctuations or changes in interest rates may require the examiner to adjust the valuation of the reserves to reflect current conditions.

The engineer is responsible for ensuring that the evaluation includes only proved-developed-producing reserves, unless otherwise directed by the lender. In some cases, the lender might give value to a property or well that is proved-developed-nonproducing if it has been drilled and completed, but is not producing because sales facilities or a gas pipeline hookup has not been completed. The lender would, however, deduct a safety factor by cutting back the reserves assumed to be dedicated to that well because the margin of error increases. However, the lender will not generally loan against proved-undeveloped, probable, or possible reserves because of the speculative nature of those categories. Their inclusion as collateral is usually as an abundance of caution with little or no value assigned to them.

A judgment has to be made on the probable accuracy of predictions of future revenues. The engineer evaluates geologic conditions such as sand continuity, faulting, spacing, the number of wells, the diversity of properties, well productivity, the pressure production history, and overall data quality, as well as the degree of confidence the engineers have in their own numbers. Estimates based on well-established production performance are given the most credibility. Lesser weight is given to estimates derived from more speculative methods such as volumetrics, analogy with similar reservoirs, or a computer simulation of new producing zones. The examiner should carefully review the narrative portion of the engineer's report to help determine its usefulness. It will detail what data were available, how they were used, the methods of analysis, and whether a field inspection was made, including individual well tests. This section of the report should inform the examiner of the true condition of the well and reserves. It is possible for the projected cash flow to portray one picture while the narrative portrays an entirely different one.

Generally, a bank will loan up to 50 percent of the net present value of proved-developed-producing reserves; however, a lower percentage may be needed depending on a number of factors. If the reserves are in an area that is highly faulted, or if seismic work and drilling indicated that a zone is contiguous from one well to the next and the porosity and permeability of the pay-zone rock are very similar, then a smaller percentage will be used. To avoid the possibility that any individual, unforeseen event will have a significant effect on the total projection, a wide spread of properties is preferable. This applies not only to a concentration of value in any one well, but also to a concentration in one reservoir, field, or producing area. Generally, a safety factor of not less than 2:1 will be used on proved-producing properties, but on long-life and high-quality reserves, a safety factor of 1.5:1 is sometimes used. However, wells that are highly faulted may require a 3:1 or higher safety factor. Terms will usually require that the loan be fully repaid before the safety factor is reduced.

DOCUMENTATION

The documentation for a term loan is relatively simple. There is a note, a loan agreement, a deed of trust/mortgage, an assignment of production (usually in the mortgage), a title opinion, and a security agreement/financing statement. The assignment of oil and gas interests is unique because oil and gas are treated as real property while in the ground but convert to personal property interests as production is generated at the wellhead. Most lenders also require an affidavit as to payment of bills. Also, the owner or the operator is usually required to guarantee payment of the loan.

The bank will obtain an acceptable title opinion that indicates the borrower has, on the date of the loan, clear title to each of the leases under mortgage and that properties are free and clear of all liens. After the loan is closed, the bank will send a letter of instruction to notify the company sending out production checks that the bank has taken a lien on the production and to request that production checks be sent directly to the bank. The mortgage covers surface rights and mineral interests. A copy of the mortgage containing an assignment of production will be sent to the company purchasing the production, along with a request that division orders or transfer orders be prepared recording its interest in production payments. This authorizes the purchaser to send production payments directly to the bank for the account of the borrower. The security agreement and financing statement covers removable equipment, oil and gas inventory above the ground, and accounts receivable. The financing statements are filed in the real estate records of the county in which the properties are located (usually with the county clerk) and in the secretary of state's office. This filing is done to perfect security interests in equipment, which may be moved from place to place. However, some states have different requirements, and the examiner should be familiar with each state's filing requirements. The affidavit as to payment of bills is executed by the borrower to ensure that all the bills have been paid on the properties or will be paid out of loan proceeds. If bills are to be paid out of proceeds, the bank should ensure that payments are verified. The loan agreement should be read very carefully by the examiner with close attention paid to both positive and negative covenants.

The bank will usually take a collateral interest in equipment, accounts receivables, and inventory. The deed of trust/mortgage will cover real estate, surface rights, and mineral interests, and a security agreement will cover removable equipment, oil as inventory (in tanks), and accounts receivable. An appropriate filing is needed for each type of collateral. Filing requirements may vary from state to state and should be researched. Generally, collateral documents should be filed with the state and county. It is reasonable to expect the bank to have collateral files completed within two to three months.

CLASSIFICATION GUIDELINES FOR TROUBLED PRODUCTION LOANS

The classification of production loans is like all loan classifications in that it must be predicated on an independent assessment of all credit factors that are germane to the specific credit being reviewed. A comprehensive analysis of the credit must take place if any of the following factors are present:

- The loan balance exceeds 65 percent of the discounted present worth of future net income (PWFNI) of proved-developed-producing reserves, or the cash-flow analysis indicates that the loan will not amortize over four to five years.
- The credit is not performing in accordance with terms or payment of interest and/or principal.
- The credit is identified by the bank as a problem credit.
- Other factors indicate a potential problem credit.

After performing the analysis, the examiner must determine if classification is warranted. When classification is warranted, the following guidelines are to be applied when repayment of the debt is solely dependent on oil and/or gas properties pledged as collateral. A lesser percentage or less severe criticism may be appropriate when other reliable means of repayment exist for a portion of the debt.

Proved-Developed-Producing Reserves

Sixty-five percent of discounted PWFNI should be classified substandard when the discounted PWFNI is determined using historical production data (decline-curve-analysis engineering). When less than 75 percent of the reserve estimate is determined using historical production data, or when the discounted PWFNI is predicated on engineering estimates of the volume of oil/gas flow (volumetric and/or analogy-based engineering data), the collateral value assigned to substandard should be reduced accordingly. The balance, but not more than 100 percent of discounted PWFNI of proved-developed-producing (PDP) reserves, should be extended doubtful. Any remaining deficiency balance should be classified loss.

Other Reserves

In addition to PDP, many reserve-based credits will include proved-developed-nonproducing reserves, shut-in reserves, behind-the-pipe reserves, and proved-undeveloped properties (PUPs) as collateral. Due to the nature of these other reserves, there are no strict percentage guidelines for the proportion of the credit supported by this type of collateral that should remain as a bankable asset. However, only in very unusual situations would the proportion of collateral values assigned to a classification category approach the values for PDP. The examiner must ascertain the current status of each reserve and develop an appropriate amount. Examples could be reserves that are shut in due to economic conditions versus reserves that are shut in due to the absence of pipeline or transportation. PUPs require careful evaluation before allowing any bankable collateral value. An example of a bankable value for a PUP could be one that has a binding purchase contract. In every classification where a bankable value is given for any of these other reserves, the loan write-up should fully support the examiner's determination.

The above guidelines apply to production loans that are considered collateral-dependent and are devoid of repayment capacity from any other tangible source. Rarely should bankable consideration be given to loans that are completely collateral dependent in excess of the liquidation value of the pledged reserves. Once again, there is no substitute for a specific, case-by-case analysis of applicable credit and collateral factors pertaining to each individual credit. Frequently, when a lender encounters problems with a production credit, numerous other types of assets (for example A/R, inventories, or real estate) are encumbered in an effort to protect the bank's interests. Other types of collateral and sources of repayment should be carefully evaluated on a case-by-case basis.

SAMPLE CASE

The following case describes some of the general principles related to production lending. A customer applied for a $100,000 loan to help fund the purchase of oil reserves, which will be used to secure the note. Based on an analysis, the loan officer agreed to make a loan and secure it with oil production. As part of the analysis, the loan officer ordered an engineer's report on the properties to determine the half-life of the cash flow—the point at which 50 percent of cash flow available for debt service has been depleted. Using table 1 (presented earlier in the "Evaluation of Reserves" subsection), the loan officer determined that cumulative PWFNI equals $198,800 and 50 percent of that amount equals $99,400. In the next step, the loan officer determined the point in time that $99,400 is reached, which in this case is 17 months. Based on these calculations, the loan officer determined that the maximum loan should not exceed $99,400 and should be repaid within 17 months. He offered a term loan to the borrower for $99,400 with 17 monthly payments of $5,847 principal plus interest of 12 percent. Although the loan request was for $100,000, the borrower accepted the offer. Shortly after the loan is made, the value of oil declines from $18 bbl to $12 bbl, and the discount used for evaluations increases from 10 to 15 percent. As a result, table 1 was revised. Table 2 includes these new factors.

TABLE 2
ENGINEER'S REPORT—EVALUATION OF OIL AND GAS PROPERTIES

Year	*Production @$12 bbl*	*Future Income*	*Operating and Other Expenses*	*Future Net Income*	*PW Future Income @15%*	*PW Future Net Income @15%*
1	5,000	$ 60,000	$10,000	$ 50,000	$ 56,000	$ 46,600
2	4,000	48,000	8,000	40,000	38,900	32,400
3	3,000	36,000	7,000	29,000	25,400	20,400
4	2,000	24,000	6,000	18,000	14,700	11,000
5	1,000	12,000	5,000	7,000	6,400	3,700
Total	15,000	$180,000	$36,000	$144,000	$141,400	$114,100

The loan now exceeds 65 percent of PWFNI of PDP reserves, and a comprehensive analysis of the credit is performed. Because the obligor is devoid of other repayment capacity or other reliable means of repayment, with total support of the debt provided solely by the pledged production, the loan should be classified. Sixty-five percent of discounted PWFNI of PDP reserves equals $74,165, and this amount will be classified substandard. The balance of $16,827, which is also supported by discounted PWFNI of PDP reserves, should be classified doubtful. The loan should be placed on nonaccrual status with any outstanding interest classified as loss.

TERMINOLOGY

The following are abbreviated explanations or discussions of some of the terms found in engineering reports and energy-lending transactions.

Analogy-based engineering data. Comparative analyses relating past performances of comparable properties to determine possible future reserves.

Assignment of production. Usually in the mortgage agreement, it allows direct payment from purchaser to the bank for oil production. Gas purchases generally are paid to the operator, and the operator then pays the bank.

Carried interest. When a party or parties have their expenses paid (carried) by other parties up to a specified limit.

Decline curves. Used to determine reserves by extrapolation of historical production data.

Deed of trust/mortgage. Covers real estate, surface rights, and mineral interests. Mortgage is unique because oil and gas are treated as real property while in the ground but converted to personal property interests as production is generated at the wellhead and as oil and gas enter storage tanks or a pipeline. The security agreement portion of the oil and gas mortgage will usually cover fixtures and equipment affixed to the well site.

Development wells. Drilled in the proven territory of a field, they have a high likelihood of producing oil or gas.

Division orders. Set out the borrower's interest in the property and direct production payments. Division order title opinions can be used to verify ownership and will contain the legal description of properties.

Escalating. Involves the difficult task of predicting future prices of oil and gas for valuing production. Escalating the value of production usually increases the risk to the lender. Examiners should carefully review the basis for escalating values when it has a significant impact on the value of the collateral and/or cash flow. Also, the examiner should carefully review how future expenses related to each well are estimated.

Exploratory well. Also known as a ''wildcat,'' a well drilled in an unproven area. The term originated in early drilling days in Pennsylvania when wells were drilled within the sight and sound of wildcats.

Fault. A break or fracture in the earth's crust that causes rock layers to shift.

Field. An area in which a number of wells produce from a reservoir or from several reservoirs at various depths.

Formation. A bed or deposit of substantially the same kinds of rocks.

Fracturing, frac'ing, frac job. Refers to pumping fluids under extremely high pressure into a formation to create or enlarge fractures through which oil or gas can move. Propping agents such as sand are sent down with fluids to hold the fractures open. Many completed wells require additional treatment (stimulation) before oil or gas can be produced.

Lease. A contract between the landowner (lessor) and the lessee that gives the lessee the right to exploit the premises for minerals or other products and to use the surface as needed. However, surface damages would normally have to be reimbursed. Surface ownership is different from mineral ownership in many cases. Also, if drilling does not begin during a specified time period, the lease will expire.

Lithology. The scientific study of rocks.

Log(s). Used to record three basic measurements: electrical, radioactive, and sonic. The logging device is lowered into the well bore and transmits signals to the surface. These are recorded on film and used to make a log showing the recorded measurements that are used to analyze the formation's porosity, fluid saturation, and lithology. The log's header gives the log's type and date, the operator, the well name, and other information.

Market-out. A clause that basically allows the purchaser to stop paying the original contract price and institute a lower price with the intent of maintaining the marketability of the gas. Some contracts allow the producer to be released from the contract if he refuses the lower price or may offer other remedies.

Mineral rights. The ownership of minerals under a tract, which includes the right to explore, drill, and produce such minerals, or assign such rights in the form of a lease to another party. Mineral-rights ownership may or may not be severed from land-surface ownership, depending on state law. Title in fee simple means all rights are held by one owner; the fee in surface owner does not hold mineral rights. The term ''minerals'' is loosely used to refer to mineral ownership and even, incorrectly, to royalty ownership. A mineral acre is the full mineral interest under one acre of land.

Operator. The manager of drilling and production for the owner.

Perforations. The holes in casing and cement through which oil and/or gas flow from formation into wellbore and up to surface.

Permeability. A measure of how easily fluids may flow through pore spaces. A tight rock or sand formation will have low permeability and, thus, low capacity to produce oil or gas. Wells in these zones usually require fracturing or other stimulation.

Porosity. Refers to the pore space in rock that enables it to hold fluids.

Reservoir or pool. A single accumulation of oil or gas trapped in a rock body.

Reserves. The estimated amount of oil and gas in a given reservoir that is capable of being profitably recovered, assuming current costs, prices, and technology. Not to be confused with oil and gas in place, which is the total amount of petroleum in the earth regardless of whether or not it can be recovered. Recovery is a function not only of technology, but of the marketplace.

Reserve interest. The term used to describe the percent of revenue received.

Royalty interest. The share of gross production proceeds from a property received by its mineral owner(s), free of exploration, drilling, and production costs. Typically one-eighth to one-sixth of production, but fractions may be higher. Royalty payments take precedence over all other payments from lease revenues.

Primary, secondary, and tertiary recovery. Relates to the method of obtaining production from a well. Primary recovery is production from a reservoir through flowing or pumping wells because of the existence of natural energy within the reservoir. This usually recovers about 10 to 35 percent of the oil and gas in place. Secondary recovery is any method by which essentially depleted reservoir energy is restored. This may be accomplished by injection of liquids or gases or both. Tertiary recovery is any enhanced method employed after secondary recovery and is generally very costly.

Runs. A term used to refer to oil or gas production income from a lease.

Seismic survey or shooting. A method of gathering information by recording and analyzing shock waves artificially produced and reflected from subsurface rocks.

Stripper wells. Wells that make less than 10 barrels of oil per day based on the last 12 months or wells that make less than 60,000 cubic feet of gas per day based on the last 90 days.

Volumetric calculations. Determine oil or gas reserves by use of rock volume and characteristics.

Working interest. Also referred to as an operating interest, the term used to describe the lease owner's interest in the well. Lease owners are the ones who pay for drilling and completing the well. Lease owners pay 100 percent of cost and receive all revenues after taxes and royalties are paid.

Workover. Relates to the process of cleaning out or other work on a well to restore or increase its production.

Energy Lending—Production Loans
Examination Objectives
Effective date May 1996

Section 2150.2

1. To determine if policies, practices, procedures, and internal controls for energy loans are adequate to identify and manage the risks the bank is exposed to.
2. To determine if bank officers are operating in conformance with the established guidelines.
3. To evaluate the portfolio for performance, credit quality, collateral sufficiency, and collectibility.
4. To determine the scope and adequacy of the audit function.
5. To determine compliance with applicable laws and regulations.
6. To initiate corrective action when policies, practices, procedures, or internal controls are deficient or when violations of laws or regulations have been noted.

INTRODUCTION

Asset-based lending is a specialized area of commercial bank lending in which borrowers assign their interests in certain accounts receivable and inventory, and in selected cases fixed assets, to the lender as collateral. In asset-based lending, the primary repayment source is the conversion of the pledged assets into cash. Asset-based lending differs from a commercial loan in which the bank takes a security interest in all accounts receivable and inventory owned or acquired by the borrower. This section will discuss asset-based lending in relation to the characteristics of the borrower, its advantages to the borrower and the bank, credit and collateral analysis, documentation, and safeguards to ensure the authenticity and collectibility of the assigned receivables.

The examiner must judge the quality of the asset-based credit by evaluating the financial condition and debt-servicing ability of the borrower and the quality of the collateral. In addition, the examiner must evaluate the bank's credit policy, internal controls, audit procedures, and operational practices.

Many borrowers whose financial condition is not strong enough to allow them to qualify for regular, secured commercial bank loans may use asset-based loans to meet their financial needs. Some examples of asset-based borrowers are—

- businesses that are growing rapidly and need year-round financing in amounts too large to justify commercial lines of credit secured by blanket liens on accounts receivable and inventory,
- businesses that are nonseasonal and need year-round financing because working capital and profits are insufficient to permit periodic cleanups,
- businesses whose working capital is inadequate for their volume of sales and type of operation, and
- businesses that cannot obtain regular commercial loan terms because of deteriorating credit factors.

Some advantages of asset-based lending for the borrower are—

- efficiency in financing an expanding operation because the business's borrowing capacity expands along with increases in levels of accounts receivables, inventory, and sales;
- the ability to take advantage of purchase discounts because the company receives immediate cash on its sales and is able to pay trade creditors in a timely manner (consistent usage of purchase discounts reduces the cost of goods sold and enhances the gross profit margin); and
- the interest paid on asset-based loans may be lower than for alternate sources of funds.

Some advantages of asset-based lending for banks are—

- a relatively high-yield loan is generated commensurate with the perceived credit risk of the borrower;
- a depository relationship is formed that provides income and enhances the bank's ability to monitor changes in the borrower's cash flow and overall financial condition;
- banking relationships with longstanding customers whose financial conditions no longer warrant traditional commercial bank loans can continue;
- new business is generated by prudently lending to financially weaker customers who could not qualify for normal commercial loans; and
- potential loss is minimized when the loan is collateralized by a percentage of the accounts receivable and inventory.

CREDIT ANALYSIS

Although asset-based loans are collateralized and closely monitored, it is important to analyze the borrower's financial statements. Even if the collateral is of good quality and supports the loan, the borrower should demonstrate financial progress. Full repayment through collateral liquidation is normally a solution of last resort. An examiner should analyze the borrower's financial statements with particular emphasis on trends in working capital, review trade reports, analyze accounts receivable and inventory turnover, and review the agings of receivables and payables. Furthermore, the prompt payment of taxes, especially payroll taxes, should be verified. One reason for a company to obtain asset-based financing is to maximize discounts offered by suppliers; therefore, it should pay creditors promptly upon receiving the financing.

Bank management's ability to recognize a customer's financial problems as they develop, and to initiate orderly liquidation, if necessary, is important in the supervision of asset-based financing. Theoretically, a borrower's line could be fully liquidated by discontinuing further advances, collecting the assigned receivables, and liquidating pledged inventory. However, such drastic action would most likely cause the borrower's business to close, resulting in a probable deterioration of the receivables from new disputes and in returns and offsets. Consequently, the bank usually notifies its borrower of a contemplated liquidation, which gives the borrower time to seek other means of continuing business so that the bank's loan may be liquidated in an orderly manner without losses or other adverse effects. Unless the bank has initiated an orderly liquidation, examiners should specially mention or classify receivable and inventory lines in which the borrower's financial position has declined so that continued financing is not prudent. When a liquidation is occurring, classification of the credit may not be necessary if the borrower's business is continuing, the existing collateral is of good quality, liquidation value sufficiently covers outstanding debt, and no collateral deterioration is anticipated.

A related issue concerning asset-based loans is the amount of excess availability associated with the revolving line of credit. The quantity of a borrowing company's excess availability is an excellent indicator of whether it has the capacity to service its loan. If a status report shows little availability, the borrower has used all of the cash that the pledged receivables and inventory are capable of generating under the asset-based line of credit. Since these loans may not yet be on the bank's watch list or problem-loan report, it is important for the examiner to track, over a fiscal-year period, a borrower's changing levels of availability when performing an analysis of creditworthiness. This analysis is especially critical for borrowers whose business is seasonal. Initial credit analyses of potential asset-based loan customers should include detailed projections showing that availability under revolving lines of credit at anticipated advance rates would be sufficient to meet the borrower's working-capital needs. Occasionally, overadvance lines are part of the initial credit facility.

Bank management must continually evaluate the realizable value of receivables and inventory pledged. To do so, management should review the quality of the receivables and inventory pledged, including documentation; the safeguards imposed to ensure the authenticity and collectibility of the assigned receivables; and the loan agreement and compliance therewith. The information obtained is sometimes difficult to interpret unless it is related to other periods, comparable businesses, or industry statistics. Comparative analysis helps indicate the continuing value of the collateral.

Lender-liability exposure is a risk in all types of commercial lending, but especially in asset-based lending. Borrowers using asset-based financing are generally very dependent on its continuation, so an abrupt cessation of a line of credit would be more likely to result in legal action against a lender. To protect themselves as much as possible from lender-liability lawsuits, banks frequently use time notes (with renewal options). Time notes are supported by loan agreements that usually include more numerous and detailed loan covenants. Legal counsels for both the lender and borrower should approve the loan agreement and covenants. At times, the borrower may not comply with one or more covenants in a loan agreement. The lender may agree to waive specific covenant violations to give a borrower time to take corrective action. If a covenant such as a financial covenant requiring a minimum capital level is waived, the waiver should be formally communicated to the borrower in writing. The lender should avoid both not taking action for a period of time and not issuing a written waiver for a covenant violation. In either case, if a covenant violation is subsequently used as a reason to cancel an asset-based loan, the lender is more vulnerable to lender liability. The lender should be careful to be consistent in all actions regarding the borrower.

ASSET-BASED LOAN AGREEMENTS

An asset-based loan agreement is a contract between a borrower and the bank that sets forth conditions governing the handling of the account and the remedies available in the event of default. The following areas should be addressed in the loan agreement:

- *Eligible accounts receivable.* This involves identifying classes of receivables that will not be regarded as acceptable collateral. Certain types of receivables carry a higher degree of risk relative to the willingness and ability of account debtors to pay and, by their very nature, should be excluded from the lending formula. The following are typical classes of ineligible receivables:

—*Delinquent accounts.* Eligible receivables generally exclude accounts that are more than a given number of days delinquent, most often 60 days or more past due. Delinquency is frequently expressed in loan agreements as a given number of days from the invoice date, such as 90 days from the invoice date when payment is required in 30 days, which is the most common payment term. Expressing delinquency in days from the invoice date prevents a borrower from reducing the volume of ineligible delinquent accounts by giving dated terms (extending payment days). For example, accounts with 30-day trade terms that are becoming 60 days delinquent could otherwise be maintained in the eligible-receivable base by increasing payment terms to 90 days. Also, under what is commonly referred to as the "50 percent rule," accounts with multiple invoices that have more than 50 percent of the total balance past due are excluded from the eligible-receivable base. For example, if a borrower's customer owes payment for ten invoices, of which six are delinquent, all ten would be considered ineligible, not just the six that are delinquent. While 50 percent is standard industry practice, lenders may be more conservative and require ineligibility for an entire account if less than 50 percent of it is past due.

—*Contra accounts.* These usually arise when the borrower both sells to and purchases from the account debtor. The risk is the possibility of direct offset against these accounts.

—*Affiliate accounts.* These accounts, unlike contra-accounts, occur when a borrower sells to an account debtor, both of whom are associated through common ownership. Associated risks include forgiveness of debt on behalf of the affiliate and a temptation for the borrower to create fraudulent invoices.

—*Concentration accounts.* A lender may be vulnerable to loss if a large percentage of the dollar amount of receivables assigned is concentrated in a few accounts. Too many sales, even to a good creditworthy customer, could ultimately cause problems should disputes arise over products or contracts. A common benchmark is that no more than 20 percent of the receivables assigned should be from one customer. Some lenders will use a percentage that is also subject to a dollar limit.

—*Bill-and-hold sales.* These occur when a product ordered by a buyer has actually been billed and is ready for shipment, but is held by the seller pending receipt of shipping instructions from the buyer. Bill-and-hold sales are not eligible as receivables to be loaned against because they are not fully executed transactions. A second party's claim could be of little value when merchandise has not been shipped and there is no evidence of acceptance on behalf of the buyer.

—*Progress billings.* These are invoices issued on partial completion of contracts, usually on a percentage basis. This practice is standard in construction and other industries where long-term contracts are generally used. Failure to complete a contract could jeopardize the collectibility of progress receivables and, therefore, should generally not be considered eligible collateral. Moreover, failure to complete contracts can expose companies to lawsuits from their customers, who may be forced to pay higher prices to other parties to complete the contracts over much shorter time periods. The only exception for progress billings is when, on partial completion, there has been delivery of the product, and the contract clearly states that buyers have accepted the product and are responsible for payment of the product delivered.

—*Receivables subject to a purchase-money interest.* These include floor-plan arrangements, under which a manufacturer will frequently file financing statements when merchandise is delivered to the borrower. That filing usually gives the manufacturer a superior lien on the receivable. An alternative would be to enter into an agreement with the manufacturer, which specifies that rights to the receivables are subordinated to the bank.

- *Percentage advanced against eligible or acceptable accounts receivable.* The accounts-receivable advance rate, typically in the range of 75 to 85 percent, must serve the two primary functions of providing adequate cash flow for the borrower and providing a margin that gives adequate protection for the lender. Protection for the lender requires a sufficient margin for the continual costs of collection and absorption of dilution in the receivables. Selecting the proper advance rate for a borrower involves understanding the amounts and causes of portfolio dilution. Causes of dilution that are positive include the offering of discounts and various allowances. Causes that are negative include merchandise returns, bad debts, product liability, or warranty claims. An abundance of negative causes, such as bad debts, might indicate poor receivable-management practices. A lender must know how dilution is occurring in each receivable portfolio to measure it continually. This knowledge should lead to proper advance-rate selection, resulting in a loan balance protected by a receivables base with sufficient liquidation value to repay the loan.

- *Percentage advanced against eligible inventory.* The inventory advance rate typically ranges from 35 to 65 percent for finished products. Marketability and accessibility of the inventory are key factors in determining the advance rate. Proper evaluation of the liquidation value of inventory requires a firm understanding of marketability in all the various inventory stages (raw materials, works-in-process, finished merchandise). Works-in-process often have very low marketability because of their unfinished nature, and they will typically carry a very low advance rate—if they are even allowed as eligible inventory. Conversely, the raw materials or commodities (such as aluminum ingots, bars, and rolls) have a broader marketability as separately financed collateral components. When setting advance rates, it is also important to consider whether inventory is valued at LIFO (last in, first out) or FIFO (first in, first out). In an inflationary environment, FIFO reporting will result in higher overall inventory values on the customer's books.

The above factors are considerations in the conduct of inventory audits performed in connection with the granting and monitoring of asset-based loans. These audits will generally discuss the inventory from a liquidation basis. This information is critical in determining appropriate advance rates.

Pledged Receivables

The following factors should be considered in evaluating the quality of receivables pledged:

- Standard procedures require that the bank obtain a monthly aging report of the accounts receivable pledged. The eligible receivables base is then calculated by deducting the various classes of ineligible receivables. Usually the eligible receivables base will be adjusted daily during the month following receipt of the aging report. If accounts are ledgered, the base will be increased by additional sales, as represented by duplicate copies of invoices together with shipping documents and/or delivery receipts received by the bank. The receivables base will be decreased daily by accounts-receivable payments received by the borrower, who then remits the payments to the bank. Another method of payment in which the bank has tighter control is a lockbox arrangement. Under this arrangement, receivables are pledged on a notification basis and the borrower's customers remit their payments on accounts receivable directly to the bank through deposit in a specially designated account. If accounts are not ledgered but a blanket assignment procedure is used, the borrower periodically informs the bank of the amount of receivables outstanding on its books. Based on this information, the bank advances the agreed percentage of the outstanding receivables. Receivables are also pledged on a non-notification basis, with payments on the receivables made directly to the borrower who then remits them to the bank. Proper management of any asset-based credit line requires that all payments on accounts receivable be remitted to the bank, with the accounts-receivable borrowing base reduced by a like amount. The borrower's working-capital needs should then be met by drawing against the asset-based credit line.
- Slower turnover of the pledged receivables can be a strong indication of deterioration in credit quality of accounts receivable.
- Debtor accounts that are significant to the bank borrower's business should be well rated and financially strong. Borrowers should also

obtain financial statements on their major customers to make credit decisions. These financial statements should be reviewed when the bank performs its periodic audits. In addition, the borrower should maintain an appropriate level of reserves for doubtful accounts. Credit insurance is often used, which indemnifies a company against noncollection of accounts receivable for credit reasons. When credit insurance is used, the asset-based lender should be named as beneficiary.
- Dilution or shrinking of the accounts-receivable borrowing base can result from disputes, returns, and offsets. A large or increasing volume of these transactions could adversely affect the bank's collateral position.

The following safeguards, which bank management should consider and the examiner should evaluate, ensure the authenticity and collectibility of the pledged accounts receivable:

- *Audits.* To verify the information supplied by the borrower to the bank, the bank should audit the borrower's books. Audits should occur several times a year at the borrower's place of business. For satisfactory borrowers, the audit is usually performed quarterly. However, audits can occur more frequently if deemed necessary. Individuals who perform bank audits should be independent of the credit function. The scope of an audit should include—
  - —verification that the information on the borrowing-base certificate reconciles to the borrower's books;
  - —review of concentrations of accounts;
  - —review of trends in accounts receivable, accounts payable, inventory, sales, and costs of goods sold;
  - —review of the control of cash proceeds;
  - —determination that the general ledger is regularly posted;
  - —verification of submitted aging reports;
  - —review of bank reconciliations and canceled checks;
  - —determination if any accounts receivable are being settled with notes receivable;
  - —verification that the accounts-receivable ledger is noted to show that an assignment has been made to the bank;
  - —determination on non-notification accounts that all payments are remitted to the bank and that positive written confirmations are issued timely (for example, semiannually);
  - —verification that all taxes, especially sales and payroll, are paid timely; and
  - —review of compliance with the loan agreement.
- *Confirmation.* To verify the authenticity of the pledged collateral, the bank should institute a program of direct confirmation. This procedure is particularly important if the accounts receivable are pledged on a non-notification basis, since the bank does not have the same control over debtor accounts as it does when the receivables are pledged on a notification basis. Direct confirmation should be made before the initial lending arrangement and periodically thereafter. Confirmation should be on a positive basis. The bank should obtain written approval from the borrower before confirming accounts receivable on a non-notification basis.

Pledged Inventory

The following factors should be considered in evaluating the inventory pledged:

- A borrowing-base certificate, obtained from the borrower at least monthly, is normally used to calculate the dollar amount of inventory eligible for collateral. The borrowing-base certificate will show the different classes of inventory, such as raw materials, works-in-process, and finished goods. After this will be listed the different types of ineligible inventory, which will be subtracted to give the amount of eligible inventory. Finally, the advance rates are applied to the different classes of eligible inventory to determine the borrowing base.
- Factors affecting marketability, advance rates, and the decision whether to allow a class of inventory as eligible at even a low advance rate:
  - —*Obsolescence.* This could involve not only merchandise that is no longer in demand for various reasons, such as technological advances, but also style products, such as clothing, which obviously have a greater potential for obsolescence.
  - —*Seasonal goods.* It is necessary to know the seasonal highs and lows associated with a particular class of inventory, as well as the costs associated with these seasonal variations.

—*Oversupply.* If there is an oversupply in the general market of a particular class of inventory, then its value would be negatively affected.

—*Limited-use raw materials and finished goods.* These would be difficult to liquidate at a reasonable value.

Two other areas a lender must analyze in setting the inventory advance rate are the ease or difficulty, in terms of cost, of liquidating inventory in multiple locations, and the cost of maintaining certain inventory, such as food products that require refrigeration, in a salable state.

In addition to marketability, accessibility of the collateral is extremely important, as liquidation plans become meaningless if a lender cannot gain access to collateral. Constant vigilance is necessary to guard against actions that would preempt a lender's security interest in inventory. Following are some common actions that impede a lender's access to collateral:

- *Possessory liens.* A landlord lien is a common example. To protect their interest, lenders need to obtain landlord waivers to the lien.
- *Nonpossessory liens.* A purchase-money security interest is a common example. These are usually filed by trade suppliers against their customers.
- *Secret lien.* A tax lien is the most common example. To ensure that a loss of collateral does not occur, it is necessary to conduct periodic lien searches if a borrower develops financial problems.

Commercial lenders often use outside appraisal firms to help them determine prudent inventory-advance rates. Also, normal industry practice for advance rates on different classes of inventory is available through the Commercial Finance Association Information Exchange.

Turnover rates should be analyzed to identify potential slow-moving or obsolete inventory, which should be subject to a lower or no advance rate. The borrower should establish inventory reserves if the volume of slow-moving or obsolete inventory is significant, and charge-off procedures should be in effect. Inventory should be adequately insured in relation to its location and amount. Furthermore, bill-and-hold merchandise and goods held on consignment should be physically segregated from other warehoused inventory and should not be included as inventory on the borrower's books or on the borrowing-base certificate submitted to the bank.

UCC Requirements for Secured Transactions

Article 9 of the UCC applies to any transaction that is intended to create a security interest in personal property. For a detailed discussion of the UCC requirements regarding secured transactions, refer to section 2080.1, "Commercial and Industrial Loans."

1. To determine if the policies, practices, procedures, and internal controls for accounts receivable and inventory financing are adequate.
2. To determine if bank officers are conforming to established guidelines.
3. To evaluate the portfolio for collateral sufficiency, credit quality, and collectibility.
4. To determine the scope and adequacy of the audit function.
5. To determine compliance with laws and regulations.
6. To initiate corrective action when policies, practices, procedures, or internal controls are deficient or when violations of laws or regulations have been noted.

1. If selected for implementation, complete or update the Asset-Based Lending section of the Internal Control Questionnaire.
2. Based on the evaluation of internal controls and the work performed by internal/external auditors, determine the scope of the examination.
3. Test for compliance with policies, practices, procedures, and internal controls in conjunction with performing the remaining examination procedures. Also, obtain a listing of any deficiencies noted in the latest review done by internal/external auditors and determine if corrections have been accomplished.
4. Obtain a trial balance of the customer liability records and:
   a. Agree or reconcile balances to department controls and the general ledger and
   b. Review reconciling items for reasonableness.
5. Using an appropriate technique, select borrowers for examination. Prepare credit line cards.
6. Obtain the following information from the bank or other examination areas, if applicable:
   a. Past-due loans.
   b. Loans in a nonaccrual status.
   c. Loans on which interest is not being collected in accordance with the terms of the loan. (Particular attention should be paid to loans that have been renewed without payment of interest.)
   d. Loans whose terms have been modified by a reduction on interest rate or principal payment, by a deferral of interest or principal, or by other restructuring of repayment terms.
   e. Loans transferred, either in whole or in part, to another lending institution as a result of a sale, participation, or asset swap since the previous examination.
   f. Loans acquired from another lending institution as a result of a purchase, participation, or asset swap since the previous examination.
   g. Loan commitments and other contingent liabilities.
   h. Extensions of credit to employees, officers, directors, principal shareholders, and their interests, specifying which officers are considered executive officers.
   i. Extensions of credit to executive officers, directors, principal shareholders, and their interests, of correspondent banks.
   j. A list of correspondent banks.
   k. Miscellaneous loan debit and credit suspense accounts.
   l. Loans considered "problem loans" by management.
   m. Shared National Credits.
   n. Specific guidelines in the lending policy.
   o. Each officer's current lending authority.
   p. Current interest-rate structure.
   q. Any useful information obtained from the review of the minutes of the loan and discount committee or any similar committee.
   r. Reports furnished to the loan and discount committee or any similar committee.
   s. Reports furnished to the board of directors.
   t. Loans classified during the preceding examination.
7. Review the information received and perform the following for:
   a. Loans transferred, either in whole or in part, to or from another lending institution as a result of a participation, sale/purchase, or asset swap:
      - Participations only:
        — Test participation certificates and records and determine that the parties share in the risks and contractual payments on a pro rata basis.
        — Determine that the bank exercises similar controls and procedures over loans serviced for others as for loans in its own portfolio.
        — Determine that the bank, as lead or agent in a credit, exercises similar controls and procedures over syndications and participations sold as for loans in its own portfolio.
      - Procedures pertaining to *all* transfers:
        — Investigate any situations where loans were transferred immediately prior to the date of examination to determine if any were transferred

to avoid possible criticism during the examination.

- Determine whether any of the loans transferred were either nonperforming at the time of transfer or classified at the previous examination.
- Determine that low-quality loans transferred to or from the bank are properly reflected on its books at fair market value (while fair market value may be difficult to determine, it should at a minimum reflect both the rate of return being earned on these loans as well as an appropriate risk premium).
- Determine that low-quality loans transferred to an affiliate are properly reflected at fair market value on the books of both the bank and its affiliate.
- If low-quality loans were transferred to or from another lending institution for which the Federal Reserve is not the primary regulator, prepare a memorandum to be submitted to the Reserve Bank supervisory personnel. The Reserve Bank will then inform the local office of the primary federal regulator of the other institution involved in the transfer. The memorandum should include the following information, as applicable:
  - Name of originating institution.
  - Name of receiving institution.
  - Type of transfer (i.e., participation, purchase/sale, swap).
  - Date of transfer.
  - Total number of loans transferred.
  - Total dollar amount of loans transferred.
  - Status of the loans when transferred (e.g., nonperforming, classified, etc.).
  - Any other information that would be helpful to the other regulator.

b. Miscellaneous loan debit and credit suspense accounts:
- Discuss with management any large or old items.
- Perform additional procedures as deemed appropriate.

c. Loan commitments and other contingent liabilities:
- Analyze the commitment or contingent liability if the borrower has been advised of the commitment, and the combined amounts of the current loan balance (if any) and the commitment or other contingent liability exceeding the cutoff.

d. Loans classified during the previous examination:
- Determine disposition of loans so classified by transcribing:
  - Current balance and payment status, or
  - Date loan was repaid and source of payment.
  - Investigate any situations where all or part of the funds for the repayment came from the proceeds of another loan at the bank, or as a result of a participation, sale, or swap with another lending institution.
  - If repayment was a result of a participation, sale, or swap, refer to step 7a of this section for the appropriate examination procedures.

e. Uniform Review of Shared National Credits:
- Compare the schedule of credits included in the Uniform Review of Shared National Credits program to line cards to ascertain which loans in the sample are portions of shared national credits.
- For each loan so identified, transcribe appropriate information from schedule to line cards. (No further examination procedures are necessary in this area.)

8. Consult with the examiner responsible for the Asset/Liability Management analysis to determine the appropriate maturity breakdown of loans needed for the analysis. If requested, compile the information using bank records or other appropriate sources. Refer to the Instructions for the Report of Examination section of this manual for considerations to be taken into account when compiling maturity information for the GAP analysis.
9. Prepare line cards for any loan not in the sample which, based on information derived from the above schedules, requires in-depth review.

10. Obtain liability and other information on common borrowers from examiners assigned cash items, overdrafts, lease financing, and other loan areas and together decide who will review the borrowing relationship.
11. Obtain credit files for each loan for which line cards have been prepared. In analyzing the loans, perform the following procedures:
    a. Analyze balance-sheet and profit and loss items as reflected in current and preceding financial statements, and determine the existence of any favorable or adverse trends.
    b. Review components of the balance sheet as reflected in the current financial statements and determine the reasonableness of each item as it relates to the total financial structure.
    c. Review supporting information and consolidation techniques for major balance-sheet items.
    d. Ascertain compliance with provisions of loan agreements.
    e. Review digest of officers' memoranda, mercantile reports, credit checks, and correspondence.
    f. Review the following:
        - Relationship between amount collected in a month on the receivables pledged as collateral and the borrower's credit limit.
        - Aging of accounts receivable.
        - Ineligible receivables.
        - Concentration of debtor accounts.
        - Financial strength of debtor accounts.
        - Disputes, returns, and offsets.
        - Management's safeguards to insure the authenticity and collectibility of the assigned receivables.
    g. Analyze secondary support offered by guarantors and endorsers.
    h. Ascertain compliance with established bank policy.
12. Transcribe significant liability and other information on officers, principals, and affiliations of appropriate borrowers contained in the sample. Cross-reference line cards to borrowers, where appropriate.
13. Determine compliance with laws and regulations pertaining to accounts receivable lending by performing the following steps for:
    a. *Lending Limits:*
        - Determine the bank's lending limit as prescribed by state law.
        - Determine advances or combinations of advances with aggregate balances above the limit, if any.
    b. *Section 23A, Federal Reserve Act (12 USC 371(c))—Transactions with Affiliates:*
        - Obtain a listing of loans to affiliates.
        - Compare the listing to the bank's customer liability records to determine its accuracy and completeness.
        - Obtain a listing of other covered transactions with affiliates (i.e., acceptance of affiliate's securities as collateral for a loan to any person).
        - Ensure that covered transactions with affiliates do not exceed the limits of section 23A.
        - Ensure that covered transactions with affiliates meet the collateral requirements of section 23A.
        - Determine that low-quality loans have not been purchased from an affiliate.
        - Determine that all transactions with affiliates are on terms and conditions that are consistent with safe and sound banking practices.
    c. *18 USC 215—Commission or Gift for Procuring Loan:*
        - While examining the accounts receivable loan area, determine the existence of any possible cases in which a bank officer, director, employee, agent, or attorney may have received anything of value for procuring or endeavoring to procure any extension of credit.
        - Investigate any such suspected situation.
    d. *Federal Election Campaign Act (2 USC 441b)—Political Contributions and Loans:*
        - While examining the accounts receivable loan area, determine the existence of any loans in connection with any political campaign.
        - Review each such credit to determine whether it is made in accordance with applicable banking laws and regulations and in the ordinary course of business.
    e. *12 USC 1972—Tie-In Provisions:*
        - While examining the accounts receiv-

able loan area, determine whether any extension of credit is conditioned upon:
- — Obtaining or providing an additional credit, property, or service to or from the bank or its holding company, other than a loan, discount, deposit, or trust service.
- — The customer not obtaining a credit, property, or service from a competitor of the bank or its holding company (or a subsidiary of its holding company), other than a reasonable condition to ensure the soundness of the credit.

f. *Insider Lending Activities.* The examination procedures for checking compliance with the relevant law and regulation covering insider lending activities and reporting requirements are as follows (the examiner should refer to the appropriate sections of the statutes for specific definitions, lending limitations, reporting requirements, and conditions indicating preferential treatment):

1. *Regulation O (12 CFR 215)—Loans to Executive Officers, Directors, Principal Shareholders, and Their Interests:*
   - While reviewing information relating to insiders received from the bank or appropriate examiner (including loan participations, loans purchased and sold, and loan swaps):
     - — Test the accuracy and completeness of information about accounts receivable loans by comparing it to the trial balance or loans sampled.
     - — Review credit files on insider loans to determine that required information is available.
     - — Determine that loans to insiders do not contain terms more favorable than those afforded other borrowers.
     - — Determine that loans to insiders do not involve more than normal risk of repayment or present other unfavorable features.
     - — Determine that loans to insiders, as defined by the various sections of Regulation O, do not exceed the lending limits imposed by those sections.
     - — If prior approval by the bank's board was required for a loan to an insider, determine that this approval was obtained.
     - — Determine compliance with the various reporting requirements for insider loans.
     - — Determine that the bank has made provisions to comply with the disclosure requirements for insider loans.
     - — Determine that the bank maintains records of public disclosure requests and the disposition of the requests for a period of two years.
2. *Title VIII of the Financial Institutions Regulatory and Interest Rate Control Act of 1978 (FIRA) (12 USC 1972(2))—Loans to Executive Officers, Directors, and Principal Shareholders of Correspondent Banks:*
   - Obtain from or request the examiners reviewing ''Due from Banks'' and ''Deposit Accounts'' to verify a list of correspondent banks provided by bank management and ascertain the profitability of those relationships.
   - Determine that loans to insiders of correspondent banks are not made on preferential terms and that no conflict of interest appears to exist.

g. *Financial Recordkeeping and Reporting of Currency and Foreign Transactions (31 CFR 103.33)—Retention of Credit Files:*
   - Review the operating procedures and credit file documentation and determine if the bank retains records of each extension of credit over $5,000, specifying the name and address of the borrower, the amount of the credit, the nature and purpose of the loan, and the date thereof. (Loans secured by an interest in real property are exempt.)

14. Determine whether the consumer compliance examination uncovered any violations of law or regulation in this department. If violations were noted, determine whether corrective action was taken. Extend test to determine subsequent compliance with any law or regulation, so noted.
15. Perform appropriate steps in the separate section, Concentrations of Credits.

16. Discuss with appropriate officer(s) and prepare summaries in appropriate report form of:
    a. Delinquent loans, including a breakout of “A” paper.
    b. Loans not supported by current and complete financial information.
    c. Loans on which documentation is deficient.
    d. Inadequately collateralized loans.
    e. Classified loans.
    f. Small Business Administration delinquent or criticized loans.
    g. Transfers of low-quality loans to or from another lending institution.
    h. Concentrations of credit.
    i. Extensions of credit to major shareholders, employees, officers, directors, and/or their interests.
    j. Violations of laws and regulations.
    k. Other matters concerning the condition of the department.
17. Evaluate the function with respect to:
    a. The adequacy of written policies relating to accounts receivable financing.
    b. The manner in which bank officers are conforming with established policy.
    c. Adverse trends within the accounts receivable financing department.
    d. Accuracy and completeness of the schedules obtained from the bank.
    e. Internal control deficiencies or exceptions.
    f. Recommended corrective action when policies, practices, or procedures are deficient.
    g. The competency of departmental management.
    h. Other matters of significance.
18. Update the workpapers with any information that will facilitate future examinations.

Review the bank's internal controls, policies, practices, and procedures for making and servicing accounts receivable financing loans. The bank's system should be documented in a complete and concise manner and should include, where appropriate, narrative descriptions, flow charts, copies of forms, and other pertinent information. Items marked with an asterisk require substantiation by observation or testing.

POLICIES

*1. Has the board of directors, consistent with its duties and responsibilities, adopted written accounts receivable financing policies that—
   a. establish procedures for reviewing accounts receivable financing applications,
   b. establish standards for determining credit lines,
   c. establish standards for determining percentage advance to be made against acceptable receivables,
   d. define acceptable receivables,
   e. establish minimum requirements for verification of borrower's accounts receivable, and
   f. establish minimum standards for documentation?
2. Are accounts receivable financing policies reviewed at least annually to determine if they are compatible with changing market conditions?

RECORDS

*3. Is the preparation and posting of subsidiary accounts receivable financing records performed or reviewed by persons who do not also—
   a. issue official checks and drafts or
   b. handle cash?
*4. Are the subsidiary accounts receivable financing records reconciled, at least monthly, to the appropriate general ledger accounts, and are reconciling items investigated by persons who do not also handle cash?
5. Are loan statements, delinquent account collection requests, and past-due notices checked to the trial balances that are used in reconciling subsidiary records of accounts receivable financing loans with general ledger accounts, and are they handled only by persons who do not also handle cash?
6. Are inquiries about accounts receivable financing loan balances received and investigated by persons who do not also handle cash or pass adjustments?
*7. Are documents supporting recorded credit adjustments to loan accounts or accrued interest receivable accounts checked or tested subsequently by persons who do not also handle cash or initiate transactions (if so, explain briefly)?
8. Are terms, dates, weights, descriptions of merchandise, etc., shown on invoices, shipping documents, delivery receipts, and bills of lading scrutinized for differences?
9. Are procedures in effect to determine if the signatures shown on the above documents are authentic?
10. Are payments from customers scrutinized for differences in invoice dates, numbers, terms, etc.?

LOAN INTEREST

*11. Is the preparation and posting of loan interest records performed or reviewed by persons who do not also—
   a. issue official checks and drafts or
   b. handle cash?
12. Are independent interest computations made and compared or tested to initial loan interest records by persons who do not also—
   a. issue official checks and drafts or
   b. handle cash?

COLLATERAL

*13. Does the bank record, on a timely basis, a first lien on the assigned receivables for each borrower?
14. Do all loans granted on the security of the receivables also have an assignment of the inventory?

15. Does the bank verify the borrower's accounts receivable or require independent verification periodically?
16. Does the bank require the borrower to provide aged accounts receivable schedules periodically?
17. If applicable, are cash receipts and invoices block proven in the mailroom and subsequently traced to posting on daily transaction records?

CONCLUSION

18. Is the foregoing information an adequate basis for evaluating internal control in that there are no significant deficiencies in areas not covered in this questionnaire that impair any controls? Explain negative answers briefly and indicate any additional examination procedures deemed necessary.
19. Based on a composite evaluation, as evidenced by answers to the foregoing questions, internal control is considered (adequate/inadequate).

Securities Broker and Dealer Loans

Effective date May 1996

Section 2170.1

Some member banks provide lending services to stock brokerage firms using marketable securities as collateral. While various financial services are offered, typically most banks make loans to brokerage firms to provide them with the funding needed to carry their securities portfolio. The securities can either be held by the bank or a tri-party custodian or pledged to the bank at a depository. Collateral securities can be in physical form or can be held at a depository in book-entry form.

To promote efficiency, a brokerage firm may use a depository to hold the securities it has pledged as collateral for a bank loan. Brokerage firms deposit shares of eligible securities with the depository, and the stock certificates representing those shares are registered in the name of a common nominee. Beneficial ownership of the securities is transferred through computerized book entries, thus eliminating the physical movement of the securities. The depository has physical control of the securities while they are on deposit. Loan arrangements are made between the broker and the lending bank, with the broker providing electronic instructions to the depository to debit the firm's account and credit that of the lending bank. The depository acknowledges the transaction to the lending bank and will not reverse the entry or allow partial withdrawals without authorization from that institution. Participating banks receive daily reports showing their position in the program by broker name and type of security.

The New York Stock Exchange formed a subsidiary, the National Securities Clearing Corporation (NSCC), to provide equity clearance and continuous net settlement for the brokerage community. The Depository Trust Company in New York, under contract with the NSCC, handles the technical aspects of that operation, including final settlement. Collateral-pledging services may be offered by other depositories as well.

Book-entry transfer of ownership is limited to only those securities that are eligible for deposit in a depository. However, even if a security was depository-eligible, it would not be eligible for book-entry movement unless the lending bank was a direct or indirect participant in the depository. If the lending institution does not have a relationship, either directly or indirectly, with a depository, the securities would have to be delivered physically to the ultimate custodian (presumably the lending bank).

Securities lending is not always constrained by eligibility. Depending on the bank's underwriting standards, some banks may be willing to lend on the basis of securities that are not depository-eligible. This would preclude book-entry movement and require physical delivery.

Securities Broker and Dealer Loans
Examination Objectives
Effective date May 1996

Section 2170.2

1. To determine if policies, practices, procedures, objectives, and internal controls for securities broker and dealer loans are adequate.
2. To determine the types of loans (underwriting loan, day loan, inventory loan, margin loan, or guidance line) made, loan pricing and fees, loan-to-value ratios, and margin calls.
3. To evaluate credit quality, credit analysis, collateral and custody requirements, and procedures for lost and stolen securities.
4. To determine if bank officers are operating in conformance with the established guidelines.
5. To determine compliance with applicable laws and regulations, including Regulations T and U, the Securities Act of 1933, and the Securities Exchange Act of 1934.
6. To evaluate management information systems, particularly the lender's ability to ensure adequate collateral coverage by being able to automatically price collateral daily.
7. To determine the scope and adequacy of the audit function.
8. To initiate corrective action when policies, practices, procedures, objectives, or internal controls are deficient or when violations of laws or regulations have been noted.

1. If selected for implementation, complete or update the Securities Broker and Dealer Loans section of the Internal Control Questionnaire.
2. Based on the evaluation of internal controls and of the work performed by internal/external auditors ascertain the scope of the examination.
3. Test for compliance with policies, practices, procedures and internal controls in conjunction with performing the remaining examination procedures. Also, obtain a listing of any deficiencies noted in the latest review done by internal/external auditors, and determine if corrections have been accomplished.
4. Request the bank to supply:
   a. Schedule of approved lines for each dealer including outstanding balances.
   b. Delinquent interest billings, date billed amount of past-due interest.
5. Obtain a trial balance of all dealer accounts and:
   a. Agree balances to department controls and general ledger.
   b. Review reconciling items for reasonableness.
6. Using an appropriate technique, select borrowers to be reviewed.
7. Using the trial balance, transcribe the following information for each borrower selected onto the credit line cards.
   a. Total outstanding liability.
   b. Amount of approved line.
8. Obtain from the appropriate examiner the following schedules, if applicable to this area:
   a. Past-due loans.
   b. Loan commitments and other contingent liabilities.
   c. Miscellaneous loan debit and credit suspense accounts.
   d. Loans considered ''problem loans'' by management.
   e. Each officer's current lending authority.
   f. Current interest rate structure.
   g. Any useful information obtained from the review of the minutes of the loan and discount committee or any similar committee.
   h. Reports furnished to the loan and discount committee or any similar committee.
   i. Reports furnished to the board of directors.
   j. Loans classified during the preceding examination.
   k. A listing of loans charged-off since the preceding examination.
9. Review the information received and perform the following:
   a. For miscellaneous loan debit and credit suspense accounts:
      - Discuss with management any large or old items.
      - Perform additional procedures as deemed appropriate.
   b. For loans classified during the previous examination, determine disposition of loans so classified by transcribing:
      - Current balances and payment status, *or*
      - Date loan was repaid and sources of payment.
   c. For loan commitments and other contingent liabilities, analyze if:
      - The borrower has been advised of the contingent liability.
      - The combined amounts of the current loan balance and the commitment or contingent liability exceed the cutoff.
   d. Select loans which require in-depth review based on information derived when performing the above steps.
10. For those loans selected in step 6 above and for any other loans selected while performing the above steps, transcribe the following information from the bank's collateral record onto the credit-line cards:
    a. A list of collateral held, including date of entry, and amount advanced.
    b. A brief of the agreement between the bank and the dealer.
    c. Evidence that the proper documentation is in place.
    d. Details of any other collateral held.
11. The examiner should be aware that certain stock-secured purpose transactions with and for brokers and dealers are exempt from the

margin restrictions of Regulation U. Refer to the regulation for a complete description of such transactions, which include the following:

a. Temporary advances to finance cash transactions.
b. Securities in transit or transfer.
c. Day loans.
d. Temporary financing of distributions.
e. Arbitrage transactions.
f. Credit extended pursuant to hypothecation.
g. Emergency credit.
h. Loans to specialists.
i. Loans to odd-lot dealers.
j. Loans to OTC market makers.
k. Loans to third-market makers
l. Loans to block positioners.
m. Loans for capital contributions.

12. Discuss with appropriate officer(s) and prepare summaries in appropriate report form of:
    a. Delinquent loans, including a breakout of ‘‘A’’ paper.
    b. Loans on which collateral documentation is deficient.
    c. Recommended corrective action when policies, practices or procedures are deficient.
    d. Other matters regarding the condition of the department.
13. Prepare appropriate comments for examination report stating your findings with regard to:
    a. The adequacy of written policies relating to dealer loans.
    b. The manner in which bank officers are conforming with established policy.
    c. Schedules applicable to the department that were discovered to be incorrect or incomplete.
    d. The competence of departmental management.
    e. Internal control deficiencies or exceptions.
    f. Other matters of significance.
14. Update the workpapers with any information that will facilitate future examinations.

Review the bank's internal control, policies, practices and procedures for making and servicing loans. The bank's system should be documented in a complete and concise manner and should include, where appropriate, narrative descriptions, flowcharts, copies of forms used and other pertinent information.

POLICIES

1. Has the board of directors, consistent with its duties and responsibilities, adopted written loan policies that:
   a. Establish standards for determining broker and dealer credit lines?
   b. Establish minimum standards for documentation?
2. Are such loan policies reviewed at least annually to determine if they are compatible with changing market conditions?
3. Is a daily record maintained summarizing loan transaction details, i.e., loans made, payments received and interest collected to support applicable general ledger account entries?
4. Are frequent note and liability ledger trial balances prepared and reconciled with controlling accounts by employees who do not process or record loan transactions?
5. Is an exception report produced and reviewed by operating management that encompasses extensions, renewals or any factors that would result in a change in customer account status?
6. Do customer account records clearly indicate accounts which have been renewed or extended?

LOAN INTEREST

7. Is the preparation and posting of interest records performed and reviewed by appropriate personnel?
8. Are any independent interest computations made and compared or adequately tested to initial interest records by appropriate personnel?

COLLATERAL

9. Are multicopy, prenumbered records maintained that:
   a. Detail the complete description of collateral pledged?
   b. Are typed or completed in ink?
10. Are receipts issued to customers covering each item of negotiable collateral deposited?
11. If applicable, are the functions of receiving and releasing collateral to borrowers and of making entries in the collateral register performed by different employees?
12. Are appropriate steps with regard to Regulation U being considered in granting dealer and broker loans?

CONCLUSION

13. Is the foregoing information an adequate basis for evaluating internal control in that there are no significant deficienicies in areas not covered in this questionnaire that impair any controls? Explain negative answers briefly, and indicate any additional examination procedures deemed necessary.
14. Based on composite evaluation, as evidenced by answers to the foregoing questions, internal control is considered (adequate/inadequate).

INTRODUCTION

Factoring is the purchase, essentially without recourse, of the accounts receivable of a client by a bank (the factor). Generally, factor clients are small, undercapitalized companies or start-up firms with limited liquidity that generally do not qualify for more traditional bank financing. In contrast to accounts receivable financing, where the client retains the credit and collection risk associated with the receivables, factoring transfers these risks to the factor. For the client, the principal advantage of factoring is the assurance that it will receive the proceeds of its sales, regardless of whether the factor is paid. Furthermore, the client does not have to maintain a credit department to evaluate the creditworthiness of customers, collect past-due accounts, or maintain accounting records on the status of receivables. The factor assumes these responsibilities. An additional advantage for the client is that under the terms of an ''advance factoring'' arrangement, the client receives payment for its receivables before the time stated on the invoice.

Two basic types of factoring service offered by the industry are (1) maturity factoring and (2) advance factoring. In maturity factoring, an average maturity due date is computed for the receivables purchased within a given time period, and the client receives payment on that date. Advance factoring is computed in the same way; however, the client has the option of taking a percentage of the balance due on a receivable in advance of the computed average maturity due date. The remainder of the receivable, sometimes called the ''client's equity,'' is payable on demand at the due date.

ACCOUNTING FOR FACTORING

The factor's balance sheet reflects the purchased accounts receivable as an asset account, ''factored receivables,'' with ''due to clients'' as the corresponding liability. Usually, the balance of due-to-clients will be less than the factored receivables because of payments and advances to the clients. If, however, the factor makes advances to the client in amounts that exceed amounts due to the client, the advances will be shown as ''overadvances.'' Overadvances are common and usually secured by other collateral. The factoring agreement should set limits on the amount of overadvances available at any one time, generally based on specified collateral, such as the client's inventory. The relationship to inventory is based on the premise that the inventory will be sold, thus generating receivables that the factor has contracted to purchase. Proceeds from the factored receivables resulting from the sale of inventory are then used to repay the overadvance. If the overadvance is unsecured, it should be offset by a corresponding reduction in the ''client's equity.'' The factor's income statement will show factoring commissions, which represent the discount on the receivables purchased, as income. Interest income for advances on the due-to-client balances may or may not be a separate line item.

Since factoring is a highly competitive industry, price cutting has reduced factoring commissions to the point that they provide minimal support to a factor's earnings. As a result, interest margins on factoring advances represent an increasingly important part of a factor's net income. An analysis of proportional changes in the due-to-clients account should provide valuable insight into the analysis of the earnings of a bank's factoring activities. As more clients take advances (reducing due-to-clients), profit margins should widen. Conversely, as the due-to-clients proportion of total liabilities rises, profit margins may be expected to narrow.

FACTORING AGREEMENT, APPROVAL PROCEDURES, AND EXAMINER'S EVALUATION

The typical factoring agreement stipulates that all of a client's accounts receivable are assigned to the factor. However, the agreement between the factor and the client will usually state that receivables subject to shipping disputes and errors, returns, and adjustments are chargeable back to the client because they do not represent bona fide sales. The agreement will, in most instances, require that a reserve be established against the purchased receivables to ensure the factor's access to funds for any future chargeback adjustments.

The usual approval process requires the client to contact the factor's credit department before filling a sales order on credit terms. The credit department conducts a credit review, determines the creditworthiness of the customer, and approves or rejects the sale. If the credit department rejects the sale, the client may complete the sale, but at its own risk. The most commonly rejected sales are those to affiliates, known bad risks, customers whose credit cannot be verified, and customers whose outstanding payables exceed the factor's credit line to that customer. Sales made by the client without the factor's approval are considered client-risk receivables, and the factor has full recourse to the client.

Once a sale has been made and the receivable assigned to the factor, whether or not the factor has approved it, the client's account will be credited for the net invoice amount of the sale. Trade or volume discounts, early payment terms, and other adjustments are deducted from the invoice amount. The receivable then becomes part of the client's "availability" to be paid immediately or at the computed date, depending on the basis of the factoring arrangement.

Each month the client receives an "accounts-current" statement from the factor, which details daily transactions. This statement reflects the daily assignments of receivables, remittances made (including overadvances and amounts advanced at the client's risk), deductions for term loans, interest charges, and factoring commissions. Credit memos, client-risk charge-backs, and other adjustments will also be shown. Client-risk charge-backs are the amounts deducted from the remittances to the client resulting from the failure of the client's customers to pay receivables that were advanced at the client's risk.

The accounts-current statement and the availability sheets are necessary for analyzing asset quality. The factor's ability to generate these reports daily is a basic control feature. Accounting systems for a high-volume operation probably will be automated, providing the factor with the data necessary to properly monitor the client. If a monitoring system is in place, the examiner should use the data provided in the asset analysis process.

The evaluation of a factoring operation includes a review of its systems and controls as well as an analysis of the quality of its assets. A major portion of a factor's assets will be factored receivables, for which the credit department has the responsibility for credit quality and collection. The other major portion of assets will consist of client loans and credit accommodations, such as overadvances and amounts advanced at the client's risk, for which the account officers are responsible.

CREDIT DEPARTMENT EVALUATION

Because of its integral function in the credit and collection process, the credit department is the heart of a factoring operation. The department should maintain a credit file for each of its client's customers, and these files should be continually updated as purchases are made and paid for by the customers. These files should include financial statements, credit bureau reports, and details of purchasing volume and paying habits. Each customer should have an assigned credit line based on the credit department's review of the customer's credit capacity.

The objective of a credit department evaluation is to critique the credit and collection process and to assess departmental effectiveness. The examiner should have a copy of departmental policies and procedures as well as a verbal understanding of them before beginning the review. The factor's policies should include, at a minimum, well-defined field audit procedures, a fraud detection and monitoring plan, and a computer back-up plan. Customer files selected for review may be drawn from large and closely monitored customers, or they may be selected by a random sample.

ASSET EVALUATION

The asset evaluation is a twofold process. The first part is to evaluate credit accommodations to each client. The second part is to evaluate customer receivables purchased by the factor at its own risk. For the first part of the process, the examiner should obtain a list that shows the aggregate of each client's credit exposure to the factor, both direct and indirect, including overadvances and receivables purchased at the client's risk. For the second part of the process, the examiner should obtain an aging schedule of factored receivables aggregated by customer but net of client-risk receivables. The selection of clients and customers for review should be based on the same selection methods as those used for the commercial loan review. Clients with a high "dilution" of receivables (that is, customer nonpayment due to returns, shipping disputes, or errors) and those with client-risk receivables equal to 20 percent or more of factored volume might also be selected for review. Past-due factored volume is not a meaningful measure of client quality because a factor usually collects principal and interest payments directly from the client's availability.

A maturity client's availability is the sum of all factored receivables less trade and other discounts, factoring commissions, client-risk charge-backs, and other miscellaneous charges to the client's account. There may also be deductions for letters of credit and other credit accommodations. An advance client's availability would be further reduced by advances on the factored receivables, interest charges, and the reciprocal of the contractually agreed-upon "advance" percentage. This reciprocal, 20 percent in the case of a client who receives an 80 percent advance, is sometimes referred to as the client's equity in the factored receivables. Availability may be increased by liens on additional collateral, such as inventory, machinery and equipment, real estate, and other marketable assets.

A client's balance sheet will show a "due-from-factor" account instead of accounts receivable. The account balance may be somewhat lower than a normal receivables balance, thus distorting turnover ratios and other short-term ratios. A client can convert sales to cash faster with a factor than if it collected the receivables. The statement analysis should consider the client's ability to repay any advances received from the factor in the form of overadvances, term loans, or other credit accommodations. The analysis should also assess the client's ability to absorb normal dilution and the potential losses associated with client-risk receivables, particularly when these elements are unusually high.

CLASSIFICATION GUIDELINES

When classifying the credit exposure to a client, the client-risk receivables portion of factored volume is the only amount subject to classification. Because of the recourse aspect, the balance is considered an indirect obligation rather than a direct obligation. Any other credit accommodations to a client that are not included in factored receivables, such as overadvances or term loans, are also subject to classification. Customer receivables purchased by the factor at its own risk are subject to classification. Care should be taken not to classify any receivables that have already been classified under client-risk exposure. Seasonal aspects of clients' businesses should be carefully analyzed in assessing asset quality based on classification data.

CONCLUSION

Due to the large volume of daily transactions that typically flows through a factor, any internal control procedure that can be easily circumvented is a potential problem. The review of the department's internal systems and controls should be continuous throughout the examination. This review should include credit controls for both clients and customers. Since credit problems can develop rapidly in factoring, credit controls and systems must be responsive to the identification of these problems. Earnings and capital adequacy are evaluated based on the department's own performance. The factoring department's earnings trends may be evaluated by comparing the yield on assets for various periods. Factors are subject to the same price competition in the commercial finance market as accounts receivable financiers. Declining portfolio yields may reflect competitive pressures and may portend declining future profitability.

1. To determine if policies, practices, procedures, and internal controls for factoring are adequate.
2. To determine if bank officers are operating in conformance with the established guidelines.
3. To evaluate the portfolio for performance, credit quality, collectibility, and collateral sufficiency.
4. To determine the scope and adequacy of the audit function.
5. To determine compliance with applicable laws and regulations.
6. To initiate corrective action when policies, practices, procedures, or internal controls are deficient or when violations of laws or regulations have been noted.

1. If selected for implementation, complete or update the Factoring section of the Internal Control Questionnaire.
2. Based on the evaluation of internal controls and the work performed by internal/external auditors, determine the scope of the examination.
3. Test for compliance with policies, practices, procedures and internal controls in conjunction with performing the remaining examination procedures. Also obtain a listing of any deficiencies noted in the latest reviews done by internal/external auditors, and determine if appropriate corrections have been made.
4. Obtain a trial balance(s) of applicable asset and liability accounts and:
   a. Agree or reconcile balances to department controls and general ledger.
   b. Review reconciling items for reasonableness.
5. Obtain the following information:
   a. A list of all clients with their outstanding balances including total factored receivables with those purchased at the client's risk segregated, overadvances, term loans and other credit accommodations.
   b. If not included in 5a above, a list of amounts due to each client by the factor (availability reports).
   c. Aging schedules of factored receivables by client and by customer with client risk receivables segregated.
   d. Past due status reports for 5c, above.
   e. Listings of all clients and customers considered to be problems.
   f. Credits classified at the previous examination.
   g. Concentration reports by client and by customer.
   h. Exception reports highlighting dilution of factored receivables because of shipping disputes and errors, returns, or any other adjustments.
   i. Credit commitments/lines for each client including amounts for overadvances and receivables purchased at the client's risk.
   j. Credit lines for each customer.
   k. Specific lending policy guidelines including each officer's current lending authority.
   l. Current fee schedule.
   m. Any useful information obtained from the review of the minutes of the loan and discount committee or any similar committees.
   n. Reports furnished to the board of directors.
   o. Any other management reports maintained by the factoring department.
6. After consulting with the examiner-in-charge, determine the appropriate cut-off lines for:
   a. Client's aggregate direct liability (i.e., overadvances, term loans and other credit accommodations).
   b. Client's indirect liability (i.e., client-risk exposure).
   c. Customer's factored receivables not including those in 6b above.
7. Transcribe information to line cards for all client and customer credits over the cut-off limits, for all credits recognized as problems, and for credits classified at the previous examination.
8. Cross reference clients and customers with the examiners assigned to other loan areas for common borrowers, and together decide who will review the borrowing relationship.
9. Obtain credit files for all clients and customers for whom line cards were prepared and analyze the accounts by performing the following procedures:
   a. Analyze balance sheet and profit and loss items as reflected in current and preceding financial statements, determine the existence of any favorable or adverse trends.
   b. Review components of the balance sheet as reflected in the current financial statements and determine the reasonableness of each item as its relates to the total financial structure.
   c. Review supporting information for the major balance sheet items and the techniques used in consolidation, if applicable, and determine the primary sources of repayment and evaluate their adequacy.
   d. Compare the amount of the credit line(s) with the lending officer's authority.
   e. Determine compliance with the bank's established commercial loan policy.

In addition to the above procedures which are applicable to both client and customer accounts, the following additional procedures should be performed for client accounts only:

f. Determine compliance with provisions of factoring agreements.
g. Review digest of officers' memoranda, mercantile reports, credit checks and correspondence to determine the existence of any problems which might deter the contractual program as set forth in the factoring agreement.
h. Relate collateral values to outstanding debt.
i. Compare fees charged to the fee schedule and determine that the terms are within established guidelines.
j. Analyze secondary support afforded by guarantors and endorsers.

10. Perform appropriate procedural steps in Concentration of Credits section, if applicable.
11. Discuss with appropriate officer(s) and prepare summaries in appropriate report form of:
    a. Delinquent amounts, segregating those considered ''A'' paper.
    b. Violations of laws and regulations.
    c. Accounts not supported by current and complete financial information or on which other documentation is deficient.
    d. Concentrations of credit.
    e. Criticized accounts.
    f. Other matters regarding condition of asset quality.
12. Evaluate the factoring department with respect to:
    a. The adequacy of written policies relating to factoring.
    b. The manner in which bank officers are operating in conformance with established policy.
    c. Adverse trends within the factoring department.
    d. Internal control deficiences or exceptions.
    e. Recommended corrective action when policies, practices or procedures are deficient.
    f. The competency of departmental management.
    g. Other matters of significance.
13. Update the workpapers with any information that will facilitate future examinations.

Review the bank's internal controls, policies, practices and procedures for its factoring operation. The bank's system should be documented in a complete and concise manner and should include, where appropriate, narrative descriptions, flowcharts, copies of forms used and other pertinent information. Items marked with an asterisk require substantiation by observation or testing.

POLICIES

1. Has the board of directors, consistent with its duties and responsibilities, adopted written factoring policies that:
   a. Establish procedures for reviewing factoring agreements?
   b. Establish standards for determining client credit lines for each of the various types of accommodations available (i.e., factored receivables, client-risk receivables, overadvances, term loans, etc.)?
   c. Establish standards for determining individual customer limits?
   d. Require a client to contact the factor for approval before filling a sales order on credit terms?
   e. Establish standards for approving the sales orders referred to above.
   f. Establish standards for determining the percentage of advance that will be made against acceptable receivables in advance factoring arrangements?
   g. Establish standards for determining the discount on factored receivables and the interest rate or fee charged for other credit accommodations?
   h. Establish minimum standards for documentation?
2. Are factoring policies reviewed at least annually to determine if they are compatible with changing market conditions?

INTERNAL CONTROL

*3. Is the preparation and posting of subsidiary factoring records performed or reviewed by persons who do not also:
   a. Issue official checks and drafts?
   b. Handle cash?

*4. Are the subsidiary factoring records reconciled, at least monthly, to the appropriate general ledger accounts, and reconciling items investigated by persons who do not also handle cash?

5. Are accounts current statements, delinquent account collection requests, and past-due notices checked to the trial balances that are used in reconciling subsidiary records of factoring accounts with general ledger accounts, *and* handled only by persons who do not also handle cash?

6. Are inquiries about factored balances received and investigated by persons who do not also handle cash?

*7. Are documents supporting recorded credit adjustments to factored receivable accounts and the due-to-clients accounts checked or tested subsequently by persons who do not also handle cash (if so, explain briefly)?

8. Are proper records maintained for approval of:
   a. Customer orders?
   b. Client credit accommodations?

9. Are items, dates, weights, description of merchandise, etc., shown on invoices, shipping documents, delivery receipts, and bills of lading scrutinized for differences?

10. Are procedures in effect to determine if the signatures shown on the above documents are authentic?

11. Are payments from customers scrutinized for differences in invoice dates, numbers, terms, etc.?

INTEREST AND FEES

*12. Is the preparation and posting of discount, interest, and fee records performed or reviewed by persons who do not also:
   a. Issue official checks and drafts singly?
   b. Handle cash?

13. Are independent discount, interest and fee computations made and compared or tested to initial records by persons who do not also:
   a. Issue official checks and drafts?
   b. Handle cash?

COLLATERAL

*14. Does the bank record, on a timely basis, a first lien on the assigned receivables for each borrower?

15. Does the bank verify the borrower's accounts receivable or require independent verification on a periodic basis?

16. Does the bank review aged accounts receivable schedules on a regular basis?

17. If applicable, are cash receipts and invoices block proved in the mailroom and subsequently traced to posting on daily transaction records?

CONCLUSION

18. Is the foregoing information an adequate basis for evaluating internal control in that there are no significant deficiencies in areas not covered in this questionnaire that impair any controls? Explain negative answers briefly, and indicate any additional examination procedures deemed necessary.

19. Based on a composite evaluation as evidenced by answers to the foregoing questions, internal control is considered (adequate/inadequate).

INTRODUCTION

Bank premises and equipment includes land, buildings, furniture, fixtures, and other equipment, either owned or acquired by means of a capitalized lease, and any leasehold improvements. This section covers the fair valuation, general propriety, and legality of the bank's investment in premises and equipment. Other real estate owned and insurance coverage on fixed assets are discussed in other sections of this manual.

Examiners should closely review internal controls for the bank's premises and equipment to ensure that these assets are properly safeguarded and appropriately recorded on the bank's books. Controls should be in place to inventory these assets and periodically review their economic usefulness. Furniture, fixtures, and equipment whose economic usefulness has expired or that are otherwise damaged, impaired, or obsolete should be written down to value. Assets that cannot be located should be accounted for as a loss.

ACQUISITION AND VALUATION

Banks obtain premises and equipment by three primary means:

- directly purchasing by cash outlays and/or incurring debt, such as a mortgage
- indirectly investing in a corporation holding title to bank premises (The corporation may or may not be affiliated with the bank.)
- leasing bank premises and equipment from a third party

The bank's initial investment in premises and equipment should be booked at cost, which should be determined according to generally accepted accounting principles. Nondepreciable assets such as land and art should remain on the books at cost unless the asset incurs a material and permanent decline in value. Under such circumstances, the asset should be reduced to fair market value on the books and a loss should be recorded.

Assets that, over time, incur a decline in economic value should be depreciated by the bank. These assets may be depreciated differently for book and tax purposes, which may give rise to deferred-tax implications. Generally accepted accounting principles allow depreciation on straight-line, double-declining, or sum-of-years'-digits bases. The Internal Revenue Service allows accelerated depreciation methods for many assets to encourage businesses to make capital investments. While many banks follow these accelerated schedules for tax purposes, they may not depreciate these same assets as rapidly for book purposes.

LEASES

Banks frequently lease their premises and equipment rather than own them. Leases should be accounted for in accordance with Financial Accounting Standards Board Statement No. 13, "Accounting for Leases" (FASB 13). The statement requires, among other things, that the lessee capitalize certain leases. The Instructions for the Preparation of Reports of Condition and Income contain details for the capitalization of leases and specify treatment for leases entered into before 1977. If a lease is required to be capitalized, the lessee records a capital lease as an asset and a corresponding liability. The amount capitalized would be the present value of the minimum required payments over the noncancelable term, as defined, of the lease plus the present value of the payment required under the bargain purchase option, if any, less any portion of the payments representing executory expenses such as insurance, maintenance, and taxes to be paid by the lessor. The amortization period should be the life of the lease or a period established in a manner consistent with the lessee's normal schedule of depreciation for owned assets. The requirements of FASB 13 are somewhat complex, and examiners who have questions on capitalization of leases are referred to that statement for necessary detail. Leases not required to be capitalized are called operating leases, and lease payments associated with them are charged to expense over the term of the lease as they become payable.

Lease arrangements between a state member bank and its parent company or other affiliated entity should be reviewed in detail. Examiners should ensure that the lease arrangement is reasonable in relation to the cost of the asset, its current fair market value, and/or similar lease arrangements in the current market. Transactions that appear to be self-serving or otherwise unreasonable to the bank should be criticized.

LEGAL LIMITS FOR INVESTMENT

Under section 24A of the Federal Reserve Act, as implemented by section 208.22 of Regulation H, a state member bank's investment in bank premises,[1] either directly or indirectly, does not require the approval of the Board of Governors of the Federal Reserve System if the aggregate of all such investments—

(1) does not exceed the capital stock amount of the bank or
(2) does not exceed 50 percent of the bank's tier 1 capital and the bank—
   (i) is well capitalized as defined in section 208.33(b)(1) of Regulation H;
   (ii) received a composite CAMELS rating of 1 or 2 as of its most recent examination by the relevant Reserve Bank or state regulatory authority; and
   (iii) is not subject to any written agreement, cease-and-desist order, capital directive, or prompt-corrective-action directive issued by the Board or a Federal Reserve Bank.

In addition to direct investments in premises presently used by the bank, computation of the legal limitation must include—

- property acquired for future expansion;
- any investment in stocks, bonds, debentures, or similar obligations in a corporation holding title to bank premises, whether affiliated with the bank or not;
- indebtedness incurred by any bank premises holding corporation affiliated with the bank through stock ownership, as defined by section 2 of the Banking Act of 1933; and
- indirect investments in the form of loans to, or on the security of, the stock of any corporation holding title to bank premises, whether affiliated with the bank or not.

Member banks are encouraged to plan for future needs, and examiners should not arbitrarily classify real estate acquired for future use. The examiner needs to review the circumstances surrounding each individual case and determine if the period of time which the property has been held is reasonable relative to the intended use. Real estate acquired for future expansion is considered ''other real estate owned'' from the date when its use for banking is no longer contemplated. In addition, former banking premises are considered other real estate owned from the date of relocation to new banking quarters.

TRANSACTIONS WITH INSIDERS

If a member bank contracts for or purchases any securities or other property from any of its directors, any firm of which any of its directors is a member, or any of its affiliates, the transaction is subject to the requirements of sections 22(d) and 23B of the Federal Reserve Act. These sections require that transactions be made in the regular course of business on terms not less favorable to the bank than those offered to others. When the purchase is authorized by a majority of the board of directors not interested in the sale of such securities or property, the authority should be evidenced by affirmative vote or written assent. In addition, a member bank may sell securities or other property to any of its directors subject to the same stipulations.

BRANCHES

Effective July 24, 1992, a state member bank that desires to establish a new branch facility may be eligible for expedited processing of its application for approval by the Reserve Bank if it is in satisfactory financial condition, has satisfactory Community Reinvestment Act and consumer compliance examination ratings, and otherwise demonstrates compliance with all supervisory requirements. State member banks

1. Investment in furniture and fixtures is not limited under federal statute but many states do include these assets in determining limitations for investment by state-chartered banks in premises. Nevertheless, the amount of such investments will be considered if the bank requests permission to exceed the legal limitation on investment in bank premises. Capitalized leases of premises are subject to the limitations of section 24A of the Federal Reserve Act. Any excess investment resulting from capitalization of leases entered into on or after November 15, 1977, must have Board approval.

that do not meet these criteria are not eligible for expedited processing.

Notice requirements for insured depository institutions that intend to close branches are detailed in section 42 of the Federal Deposit Insurance Act. This section requires an insured depository institution to (1) submit a notice of any proposed branch closing to the appropriate federal banking agency, (2) notify its customers of the proposed closing, (3) post a notice in a conspicuous manner on the premises of the branch proposed to be closed, and (4) adopt formal written policies addressing branch closings.

CONCLUSION

As indicated earlier, the examiner responsible for bank premises and equipment should assess the appropriateness of the bank's investment in this area and the overall impact of occupancy expense on the bank. Even if a bank's total investment in bank premises is within legal limits and all of its fixed assets are valued fairly, its total expenditures for or investment in premises and equipment may be inappropriate relative to earnings, capital, or the nature and volume of the bank's operations.

Bank Premises and Equipment
Examination Objectives
Effective date May 1996

Section 2190.2

1. To determine if the policies, practices, procedures, and internal controls regarding bank premises and equipment are adequate.
2. To determine if bank officers and employees are operating in conformance with the established guidelines.
3. To determine the scope and adequacy of the audit function.
4. To determine the adequacy and propriety of the bank's present and planned investment in bank premises.
5. To determine compliance with laws and regulations.
6. To initiate corrective action when policies, practices, procedures, or internal controls are deficient or when violations of laws or regulations have been noted.

1. If selected for implementation, complete or update the Bank Premises and Equipment section of the Internal Control Questionnaire.
2. Based on the evaluation of internal controls and the work performed by internal/external auditors (see separate program) determine the scope of the examination.
3. Test for compliance with policies, practices, procedures and internal controls in conjuction with performing the remaining examination procedures. Also obtain a listing of any audit deficiencies noted in the latest review done by internal/external auditors from the examiner assigned ''Internal Control,'' and determine if appropriate corrections have been made.
4. Obtain a summary of changes in fixed asset and depreciation ledgers that have occurred since the previous examination. Also, balance each of the fixed asset subsidiary accounts to the appropriate general ledger control account.
5. Determine, by reference to excerpts of the minutes of meetings of the board of directors, that all major additions and disposals of fixed assets are properly documented.
6. Determine by observation and inquiry of appropriate management personnel, that the bank's books have been properly adjusted to reflect significant assets that are idle, abandoned, or useless.
7. In instances where bank premises are subject to lease, perform the following for:
   a. Bank as lessee:
      - For each lease which has an initial lease period of more than one year, obtain from the bank:
        — Name of lessor.
        — Expiration date.
        — Required minimum annual payments.
        — Current status.
        — Renewable option provisions.

   b. Bank as lessor:
      - Determine if the bank relies on rental income to contribute to payment of occupancy expenses and if that income is material. As a general guideline, rental income is considered material if it equals or exceeds 1 percent of total operating revenues.
      - If rental income is material, analyze the bank's potential exposure from:
        — Concentrations among lessees.
        — Impending expiration of major leases.
        — Lack of creditworthiness of lessee.
        — Non-compliance with lease terms.
8. Forward to the examiner assigned ''Funds Management:''
   a. The total minimum annual commitment under various lease agreements.
   b. The dollar amount of any significant, future fixed asset expenditure(s).
9. Determine, by reference to appropriate workpapers (see ''Insurance Coverage''), that fire and hazard insurance, in sufficient amounts, is in force.
10. Perform a limited test of the records to verify that depreciation methods are consistent with bank policy, prior years' calculations, generally accepted accounting principles, and applicable IRS laws.
11. Analyze the bank's investment in fixed assets and the annual expenditures required to carry them and determine their reasonableness relative to:
    a. Present total capital structure.
    b. Present annual earnings.
    c. Projected future earnings.
    d. Nature and volume of operations.
12. Test for compliance with the limitations set forth in section 24A of the Federal Reserve Act.
13. Review the following with appropriate management personnel or prepare a memo to other examiners for their use in reveiwing with management:
    a. Any internal control deficiencies.
    b. Any policy deficiencies.
    c. Any violations of law.
14. Review your findings with respect to the propriety and adequacy of present and projected investment in bank premises. In formulating your conclusion, consider:
    a. Size of bank.
    b. Cash flow forecasts.
    c. Existing fixed asset investments.
    d. Anticipated growth potential.

e. Bank programs to maintain assets at their most optimal use.
f. The policy used to establish the useful life of each asset.
g. Control of inventory procedures.
h. Systems used to record all asset purchases, sales and retirements between physical inventories.

15. Prepare comments regarding deficiencies or violations of law for inclusion in the examination report.
16. Prepare the appropriate write-ups for the report of examination.
17. Update workpapers with any information that will facilitate future examinations.

Review the bank's internal controls, policies, practices and procedures over additions, sales and disposals and depreciation of bank premises and equipment. The bank's system should be documented in a complete and concise manner and should include, where appropriate, narrative descriptions, flowcharts, copies of forms used and other pertinent information. Items marked with an asterisk require substantiation by observation or testing.

CUSTODY OF PROPERTY

*1. Do the bank's procedures preclude persons who have access to property from having ''sole custody of property,'' in that:
   a. Its physical character or use would make any unauthorized disposal readily apparent?
   b. Inventory control methods sufficiently limit accessibility?

ADDITIONS, SALES, AND DISPOSALS

2. Is the addition, sale or disposal of property approved by the signature of an officer who does not also control the related disbursement or receipt of funds?
3. Is board of directors' approval required for all major additions, sales or disposals of property (if so, indicate the amount that constitutes a major addition, sale or disposal $__________)?

*4. Is the preparation, addition and posting of property additions, sales and disposals records, if any, performed and/or adequately reviewed by persons who do not also have sole custody of property?

*5. Are any property additions, sales and disposals records, balanced, at least annually, to the appropriate general controls by persons who do not also have sole custody of property?

6. Are the bank's procedures such that all additions are reviewed to determine whether they represent replacements and that any replaced items are cleared from the accounts?
7. Do the bank's procedures provide for signed receipts for removal of equipment?

*8. Do the bank's policies cover procedures for selecting a seller, servicer, insurer, or purchaser of major assets (through competitive bidding, etc.), to prevent any possibility of conflict of interest or self-dealing?

9. Do the review procedures provide for appraisal of an asset to determine the propriety of the proposed purchase or sales price?

DEPRECIATION

*10. Is the preparation, addition and posting of periodic depreciation records performed and adequately reveiwed by persons who do not also have sole custody of property?

11. Do the bank's procedures require that regular charges be made for depreciation expense?

*12. Are the subsidiary depreciation records balanced, at least annually, to the appropriate general controls by persons who do not also have sole custody of property?

PROPERTY RECORDS

*13. Are subsidiary property records posted by persons who do not also have sole custody of property?

*14. Are the subsidiary property records balanced, at least annually, to the appropriate general ledger accounts by persons who do not also have sole custody of property?

BANK AS LESSOR (BANK PREMISES AND BANK-RELATED EQUIPMENT ONLY)

*15. Do policies provide for division of the duties involved in billing and collection of rental payments?

16. Are the lease agreements subject to the same direct verification program applied to other bank assets and liabilities?

17. Are credit checks performed on potential lesses?
18. Do policies provide for a periodic review of lessees for undue concentrations of affiliated or related concerns?

BANK AS LESSEE (BANK PREMISES AND BANK-RELATED EQUIPMENT ONLY)

19. Does the bank have a clearly defined method of determining whether fixed assets should be owned or leased, and is supporting documentation maintained by the bank?
20. Are procedures in effect to determine whether a lease is a ‘‘capital’’ or an ‘‘operating’’ lease as defined by the generally accepted accounting principles?
21. Do the bank’s operating procedures provide, on ‘‘capital’’ leases, that the amount capitalized is computed by more than one individual and/or reviewed by an independent party?

OTHER PROCEDURES

*22. Is the physical existence of bank equipment periodically checked or tested, such as by a physical inventory, and are any differences from property records investigated by persons who do not also have sole custody of property?
23. Do the bank’s procedures provide for serial numbering of equipment?
24. Are the bank’s policies and procedures on property in written form?
25. Is the benefit of expert tax advice obtained prior to final decision-making on significant transactions involving fixed assets?
*26. Does the bank maintain separate property files which include invoices (including settlement sheets and bills of sale, as necessary), titles (on real estate, vehicles, etc.) and other pertinent ownership data as part of the required documentation?

CONCLUSIONS

27. Is the foregoing information an adequate basis for evaluating internal control in that there are no significant additional deficiencies that impair any controls? Explain negative answers briefly, and indicate any additional examination procedures deemed necessary.
28. Based on a composite evaluation, as evidenced by answers to the foregoing questions, internal control is considered (adequate/inadequate).

A state member bank's authority to hold real estate is governed by its state laws. A bank is permitted to include owned real estate in its premises account if the real estate serves as premises for operations or is intended to be used as premises. In addition, a bank may hold other real estate owned (OREO), which is defined below. State laws dictate the terms and conditions under which state-chartered banks may acquire and hold OREO.

Definition

Bank holdings of OREO arise from the following events:

- the bank purchases real estate at a sale under judgment, decree, or mortgage when the property secured debts previously contracted;
- a borrower conveys real estate to the bank to fully or partially satisfy a debt previously contracted (acceptance of deed in lieu of foreclosure);
- real estate is obtained in exchange for future advances to an existing borrower to fully or partially satisfy debts previously contracted;
- a bank takes possession (although not necessarily title) of collateral in a collateral-dependent real estate loan (i.e., an in-substance foreclosure);
- a bank has relocated its premises and has not yet sold the old premises;
- a bank abandons plans to use real estate as premises for future expansion.

Environmental Liability

Under federal and state environmental liability statutes, a bank may be liable for cleaning up hazardous substance contamination of other real estate owned. In some cases, the liability may arise before the bank takes title to a borrower's collateral real estate. A property's transition from collateral to bank ownership may take an extended period of time. As the financial problems facing a borrower worsen, a bank may become more involved in managing a company or property. Such involvement may become extensive enough that the bank is deemed to have met substantially all ownership criteria, the absence of a clear title in the bank's name notwithstanding. Generally, the more involved bank management is in such activity, the greater the bank's exposure to any future clean-up costs assessed in connection with the property. A more thorough discussion of environmental liability can be found in section 2040.1, "Loan Portfolio Management," of this manual, under the subsection "Other Lending Concerns."

Transfer of Assets to Other Real Estate Owned

Real estate assets transferred to OREO should be accounted for individually on the date of transfer, at the lower of the recorded investment in the loan or fair value. The recorded investment in a loan is the unpaid balance, increased by accrued and uncollected interest, unamortized premium, finance charges, and loan-acquisition costs, if any, and decreased by previous write-downs and unamortized discount, if any. Any excess of the recorded investment in the loan over the property's fair value must be charged against the allowance for loan and lease losses immediately upon the property's transfer to OREO. Legal fees should generally be charged to expenses unless payment of the fees is for the purpose of enhancing the property's value (for example, obtaining a zoning variance).

Establishing a valuation allowance for estimated selling expenses may also be necessary upon transferring each property to OREO to comply with AICPA Statement of Position 92-3, Accounting for Foreclosed Assets. According to this pronouncement, the value of OREO properties must be reported at the lesser of the fair value minus estimated selling expenses or the recorded investment in the loan. For example, if the recorded investment of the property is $125, the fair value is $100, and the estimated selling expenses are $6, the carrying value for this property would be $94. The difference between the recorded investment and the fair value ($25) would be charged to the allowance for loan and lease losses at the time the property was transferred to OREO. In addition, since the bank estimated it would incur selling expenses of $6, a valuation reserve for this amount must be established. The net of the fair value and this valuation reserve for selling expenses is called the ‘‘net realizable value,’’ and in this example would be $94. Changes to this valuation reserve should be handled as outlined in the subsection ‘‘Accounting for Subsequent Changes in Market Value.’’

On the other hand, if the recorded investment in the property is $250, the fair value is $300, and the estimated selling expenses are $18, the carrying value of this property would be $250 (the lesser of the recorded investment or the fair value). In this example, a valuation reserve for estimated selling expenses is unnecessary, as netting the estimated selling expenses ($18) from the fair value ($300) would yield a net realizable value of $282.

The transfer of a loan to OREO is considered to be a ‘‘transaction involving an existing extension of credit’’ under 12 CFR 225.63(a)(7) and is exempt from Regulation Y’s appraisal requirement. However, under 12 CFR 225.63(b), the bank must obtain an ‘‘appropriate evaluation’’ of the real estate that is ‘‘consistent with safe and sound banking practices’’ to establish the carrying value of the OREO. A bank may elect, but is not required, to obtain an appraisal to serve as the ‘‘appropriate evaluation.’’ Until the evaluation is available, a bank should rely on its best estimate of the property’s value to establish the carrying value. The federal banking agencies have issued appraisal and evaluation guidelines to provide guidance to examining personnel and federally regulated institutions regarding prudent appraisal and evaluation policies, procedures, practices, and standards.

The appraisal or evaluation should provide an estimate of the parcel’s market value. Refer to section 4140.1, ‘‘Real Estate Appraisals and Evaluations,’’ for a definition of market value. Generally, market value and fair value are equivalent when an active market exists for a property. In discussing OREO, it is common practice to use the terms ‘‘fair value’’ and ‘‘market value’’ interchangeably. When no active market exists for a property, the accounting industry’s definition of fair value applies because the appraiser cannot determine a market value. The accounting industry definition requires the appraisal or evaluation to contain an estimate of the property’s fair value based on a forecast of expected cash flows, discounted at a rate commensurate with the risks involved. The cash flow estimate should include projected revenues and the costs of ownership, development, operation, marketing, and sale. In such situations, the appraiser or evaluator should fully describe the definition of value and the market conditions that have been considered in estimating the property’s value.

When a bank acquires a property through foreclosure as a junior lienholder, whether or not the first lien has been assumed, the fair value of the property should be recorded as an asset and the senior debt as a liability. The senior debt should not be netted against the assets. Any excess of the recorded investment of the property over the fair value should be charged off, as the recorded investment may not exceed the sum of the junior and senior debt. Payments made on senior debt should be accounted for by reducing both the asset and the liability, and interest that accrues on the senior debt after foreclosure should be recognized as interest expense.

For regulatory reporting purposes, a collateral-dependent real estate loan should be transferred to OREO only when the lender has taken possession (title) of the collateral. Nevertheless, to facilitate administration and tracking, banks may choose to include a collateral-dependent real estate loan in the OREO portfolio as potential or probable OREO. Examiners should review these loans using the same criteria applied to OREO.

Property the bank originally acquired for future use as premises, but for which plans have been abandoned, and property that formerly served as bank premises, should be accounted for at the lower of book value or fair value on the date of transfer to OREO. Any excess of book value over fair value should be charged to other operating expense during the current period.

Carrying Value of Other Real Estate Owned

A bank should have a policy for periodically determining the fair value of its OREO property by obtaining an appraisal or an evaluation, as appropriate. While the Federal Reserve has no prescribed time frame for when a bank should reappraise or reevaluate its OREO property, the bank’s policy should conform to state law, if applicable, and address the volatility of the local real estate market. Specifically, a bank should determine if there have been material changes to the underlying assumptions in the appraisal or valuation that have affected the original estimate of value. If material changes have occurred, the bank should obtain a new appraisal or evaluation based on assumptions that reflect the changed conditions.

Accounting for Subsequent Changes in Market Value

Charges for subsequent declines in the fair value of OREO property should never be posted to the allowance for loan and lease losses. If an appraisal or evaluation indicates a subsequent decline in the fair value of an OREO property, the loss in value should be recognized by a charge to earnings. Banks should attempt to determine whether a property's decline in value is temporary or permanent, taking into consideration each property's characteristics and existing market dynamics. The preferred treatment for permanent losses in value is the direct write-down method, in which the charge to expenses is offset by a reduction in the OREO property's carrying value. If the reduction in value is deemed temporary, the charge to earnings may be offset by establishing a valuation allowance specifically for that property. In the event of subsequent appreciation in the value of an OREO property, the increase can only be reflected by reducing this valuation allowance or recognizing a gain upon disposition, but never by a direct write-up of the property's value. A change to the valuation allowance should be offset with a debit or credit to expense in the period in which it occurs.

In addition to the preceding treatment of the write-down in the OREO value, the previous subsection "Transfer of Assets to Other Real Estate Owned" discusses setting up a valuation allowance for estimated selling expenses associated with the sale of the other real estate. The balance of this valuation reserve can fluctuate based on changes in the fair value of the property held, but it can never be less than zero. The following examples are presented to illustrate the treatment that subsequent depreciation and appreciation would have on OREO properties.

Depreciation in OREO Property Value

Assume a bank has written down its initial recorded investment in an OREO property from $125 to its fair value of $100. Since the fair value of the property was less than the initial recorded investment, a valuation reserve for estimated selling expenses was established. In this example, assume these to be $6. Accordingly, the net realizable value was $94 ($100 minus $6). Next, assume a new appraisal indicates a fair value of $90, reducing the estimated selling expenses to $5. Although the bank must expense the depreciation in the fair value ($10), the valuation reserve for selling expenses would be reduced by the difference in the estimate of the selling expenses ($1). Given this scenario, the "adjusted" net realizable value would be $85 ($90 minus $5).

Appreciation in OREO Property Value

Assume a bank has written down its recorded investment in an OREO property to its fair value of $100. Since the fair value of the property was less than the original recorded investment, an estimated valuation reserve for selling expenses of $6 was established. Accordingly, the net realizable value was $94. A new appraisal indicates an increase in the fair value of the property to $110, with selling expenses now estimated at $7. As a result, the net realizable value is now $103. Given that the new net realizable value is greater than the recorded investment of $100, the selling expense valuation reserve is no longer necessary and the $6 can be reversed to income. Notwithstanding the property's increased fair value, the recorded investment value cannot be increased above $100. The valuation reserve for selling expenses can never be less than zero, thus prohibiting an increase in the value of the property above the recorded investment.

Accounting for Income and Expense

Gross revenue from other real estate owned should be recognized in the period in which it is earned. Direct costs incurred in connection with holding an OREO property, including legal fees, real estate taxes, depreciation, and direct write-downs, should be charged to expense when incurred.

A bank can expend funds to develop and improve OREO when it appears reasonable to expect that any shortfall between the property's fair value and the bank's recorded book value will be reduced by an amount equal to or greater than the expenditure. Such expenditures should not be used for speculation in real estate. The economic assumptions relating to the bank's decision to improve a particular OREO property should be well documented. Any payments for developing or improving OREO property are treated as capital expenditures and should be reflected by increasing the property's carrying value.

Disposition of Other Real Estate Owned

OREO property must be disposed of within any holding period established by state law and, in any case, as soon as it is prudent and reasonable. Banks should maintain documentation reflecting their efforts to dispose of OREO property, which should include—

- a record of inquiries and offers made by potential buyers
- methods used in advertising the property for sale whether by the bank or its agent
- other information reflecting sales efforts

The sale or disposition of OREO property is considered a real estate–related financial transaction under the Board's appraisal regulation. A sale or disposition of an OREO property that qualifies as a federally related transaction under the regulation requires an appraisal conforming to the regulation. A sale or disposition that does not qualify as a federally-related transaction nonetheless must comply with the regulation by having an appropriate evaluation of the real estate, that is consistent with safe and sound banking practices.

The bank should promptly dispose of OREO if it can recover the amount of its original loan plus additional advances and other costs related to the loan or the OREO property before the end of the legal holding period. The holding period generally begins on the date that legal title to the property is transferred to the bank, except for real estate that has become OREO because the bank no longer contemplates using it as its premises. The holding period for this type of OREO property begins on the day that plans for future use are formally terminated. Some states require OREO property to be written off or depreciated on a scheduled basis, or to be written off at the end of a specified time period. The bank should determine whether such requirements exist and comply with them.

Accounting for the Sale of Other Real Estate Owned

Gains and losses resulting from a sale of OREO properties for cash must be recognized immediately. A gain resulting from a sale in which the bank provides financing should be accounted for under the standards described in Statement of Financial Accounting Standards 66 (SFAS 66).

SFAS 66 recognizes that differences in terms of the sale and in selling procedures lead to different profit recognition criteria and methods. Banks may facilitate the sale of foreclosed real estate by requiring little or no down payment, or by offering loans with favorable terms. Profit shall only be recognized in full when the collectibility of the sales price is reasonably ensured and when the seller is not obligated to perform significant activities after the sale to earn the profit. Unless both conditions exist, recognition of all or part of the profit shall be deferred. Collectibility of the sale price of OREO property is demonstrated when the buyer's investment is sufficient to ensure that the buyer will be motivated to honor his or her obligation to the seller rather than lose the investment. Collectibility shall also be assessed by considering factors such as the credit standing of the buyer, age and location of the property, and adequacy of cash flow from the property.

The practice of recognizing all profit from the sale of bank-financed OREO at the time of the sale is referred to as the full-accrual method. A bank shall not recognize profit using this method until all of the following general criteria are met:

- a sale is consummated;
- the buyer's initial and continuing investments adequately demonstrate a commitment to pay for the property;
- the bank's loan is not subject to future subordination;
- the bank has transferred to the buyer the usual risks and rewards of ownership in a transaction that is in substance a sale, and it has no substantial continuing involvement in the property.

A sale will not be considered consummated until the parties are bound by the terms of the contract, all consideration has been exchanged, and all conditions precedent to closing have been performed.

Initial investment, as defined by SFAS 66, includes only cash down payments, notes supported by irrevocable letters of credit from an independent lending institution, payments by the buyer to third parties to reduce existing debt on the property, and other amounts paid by the buyer that are part of the sale price. In these situations, SFAS 66 requires that profit on the sale be deferred until a minimum down payment has been received and annual payments equal those for a loan for a similar type of property with a customary amortization period. The amount of down payment required varies by category of property: land, 20–25 percent; commercial and industrial, 10–25 percent; multifamily residential, 10–25 percent; and single-family residential, 5–10 percent. Ranges within these categories are defined further in the statement.

Continuing investment requires the buyer to be contractually obligated to make level annual payments on his or her total debt for the purchase price of the property. This level annual payment must be able to service principal and interest payments amortized for no more than 20 years for raw land, and for no more than the customary amortization term for a first-mortgage loan by an independent lending institution for other types of real estate.

If a bank finances the sale of foreclosed property it owns with a loan at less than current market interest rates or noncustomary amortization terms, generally accepted accounting principles require that the loan be discounted to bring its yield to a market rate, using a customary amortization schedule. This discount will either increase the loss or reduce the gain resulting from the transaction. Interest income is then generally recognized at a constant yield over the life of the loan.

If a transaction does not qualify for the full-accrual accounting method, SFAS 66 identifies alternative methods of accounting for sales of OREO property as described below.

The Installment Method

This method is used when the buyer's down payment is insufficient to allow the full-accrual method, but when recovery of the cost of the property is reasonably assured if the buyer defaults. The installment method recognizes the sale of the property and the booking of the corresponding loan, although profits from the sale are recognized only as the bank receives payments from the buyer. Under this method, interest income is recognized on an accrual basis, when appropriate.

Since default on the loan usually results in the seller (the bank) reacquiring the real estate, the bank is reasonably assured that it will be able to recover its costs with a relatively small down payment. Cost recovery is especially likely when loans are made to buyers who have verifiable net worth, liquid assets, and income levels adequate to service the loan. Reasonable assurance of cost recovery also may be achieved when the buyer pledges adequate additional collateral.

The Cost-Recovery Method

Dispositions of OREO that do not qualify for either the full accrual or installment methods are sometimes accounted for using the cost-recovery method. This method recognizes the sale of the property and the booking of the corresponding loan, but all income recognition is deferred. Principal payments are applied by reducing the loan balance, and interest payments are accounted for by increasing the unrecognized gross profit. No profit or interest income is recognized until either the buyer's aggregate payments exceed the recorded amount of the loan or a change to another accounting method (for example, the installment method) is appropriate. Consequently, the loan is maintained on nonaccrual status while this method is being used.

The Reduced Profit Method

This method is used in certain situations when the bank receives an adequate down payment, but the loan amortization schedule does not meet the requirements for use of the full-accrual method. The bank again recognizes the sale of the property and the booking of the corresponding loan but, as under the installment method, profits from the sale are recognized only as the bank receives payments from the buyer. Since sales with adequate down payments generally are not structured with inadequate loan-amortization schedules, this method is seldom used.

The Deposit Method

This method is used when a sale of OREO has not been consummated. It also may be used for dispositions that could be accounted for under the cost-recovery method. Under this method, a sale is not recorded, so the asset continues to be reported as OREO. Further, no profit or interest income is recognized. Payments received from the buyer are reported as a liability until the use of one of the other methods is appropriate.

Banks may promote the sale of foreclosed real estate by offering nonrecourse financing to buyers. These loans should be made under the same credit terms and underwriting standards the bank employs for its regular lending activity. Financing arrangements associated with this type of transaction are subject to the accounting treatment discussed above.

Bank records should (1) indicate the accounting method used for each sale of OREO, (2) support the choice of the method selected, and (3) sufficiently document that the institution is correctly reporting associated notes receivable, as either loans or OREO property, with valuation allowances as appropriate.

Classification of Other Real Estate Owned

The examiner should generally evaluate the quality of each OREO property to determine if classification is appropriate. OREO usually should be considered a problem asset, even when it is carried at or below its appraised value. Despite the apparent adequacy of the fair or market value, the bank's acquisition of OREO through foreclosure usually indicates a lack of demand. As time passes, the lack of demand can become more apparent, and the value of the real estate can become increasingly questionable.

When evaluating the OREO property for classification purposes, the examiner must consider the property's market value, whether it is being held in conformance with state law, and whether it is being disposed of according to the bank's plan. The amount of an OREO property subject to classification is the carrying value of the property, net of any specific valuation allowance. The existence of a specific valuation allowance does not preclude adverse classification of OREO. The examiner should review all types of OREO for classification purposes, including sales that fail to meet the standards required for the full-accrual method of accounting. When the bank provides financing, the examiner should determine whether it is prudently underwritten.

The examiner should review all relevant factors to determine the quality and risk of the OREO property and the degree of probability that its carrying value will be realized. Some factors the examiner should consider include—

- the property's carrying value relative to its market value (including the date of any appraisal or evaluation relative to changes in market conditions), the bank's asking price, and offers received;
- the source and quality of the appraisal or evaluation, including the reasonableness of assumptions, such as projected cash flow for commercial properties;
- the length of time a property has been on the market and local market conditions for the type of property involved, such as history and trend of recent sales for comparable properties;
- bank management's ability and track record in liquidating other real estate and assets acquired in satisfaction of debts previously contracted;
- income and expenses generated by the property and other economic factors affecting the probability of loss exposure;
- the manner in which the bank intends to dispose of the property;
- other pertinent factors, including property-title problems, statutory redemption privileges, pending changes in the property's zoning, environmental hazards, other liens, tax status, and insurance.

Other Real Estate Owned
Examination Objectives
Effective date May 1995

Section 2200.2

1. To determine if the policies, practices, procedures, and internal controls regarding other real estate owned are adequate.
2. To determine that bank officers and employees are operating in conformance with the established guidelines.
3. To evaluate the validity and quality of all other real estate owned.
4. To determine the scope and adequacy of the audit function.
5. To determine compliance with laws and regulations.
6. To initiate corrective action when policies, practices, procedures, or internal controls are deficient or when violations of law or regulations have been noted.

1. If selected for implementation, complete the Other Real Estate Owned section of the Internal Control Questionnaire.
2. Test for compliance with policies, practices, procedures and internal controls in conjunction with performing the remaining examination procedures and obtain a listing of any audit deficiencies noted in the latest review done by internal/external auditors and determine if appropriate corrections have been made.
3. Obtain a list of other real estate owned and agree total to general ledger.
4. Review the other real estate owned account to determine if any property has been disposed of since the prior examination and:
   a. If so, determine that:
      - The bank accepted written bids for the property.
      - The bids are maintained on file.
      - There is justification for accepting a lower bid if the bank did not accept the highest one.

   b. Investigate any insider transactions.
5. Test compliance with applicable laws and regulations:
   a. Determine that other real estate owned is held in accordance with the provisions of applicable state law.
   b. Determine if other real estate is being amortized or written off in compliance with applicable state law.
   c. Consult with the examiners assigned to ''Loan Portfolio Management,'' ''Other Assets and Other Liabilities,'' ''Reserve for Possible Loan Losses'' and ''Bank Premises and Equipment'' to determine if the situation holds real estate acquired as salvage on uncollectible loans, abandoned bank premises or property originally purchased for future expansion, which is no longer intended for such usage.
   d. Review the details of all other real estate owned transactions to determine that:
      - The property has been booked at its fair value.
      - The documentation reflects the bank's persistent and diligent effort to dispose of the property.
      - If the bank has made expenditures to improve and develop other real estate owned, proper documentation is in the file.
      - Real estate that is former banking premises has been accounted for as other real estate owned since the date of abandonment.
      - Such property is disposed of in accordance with state law.
6. Review parcels of other real estate owned with appropriate management personnel and, if justified, assign appropriate classification. Classification comments should include:
   a. Description of property.
   b. How real estate was acquired.
   c. Amount and date of appraisal.
   d. Amount of any offers and bank's asking price.
   e. Other circumstances pertinent to the classification.
7. Review the following with appropriate management personnel or prepare a memo to other examiners for their use in reviewing with management:
   a. Internal control exceptions and deficiencies in, or non-compliance with, written policies, practices and procedures.
   b. Uncorrected audit deficiencies.
   c. Violations of law.
8. Prepare comments in appropriate report form for all:
   a. Criticized other real estate owned.
   b. Deficiencies noted.
   c. Violations of law.
9. Update the workpapers with any information that will facilitate future examinations.

Review the bank's internal controls, policies, practices and procedures for other real estate owned. The bank's systems should be documented in a complete and concise manner and should include, where appropriate, narrative descriptions, flowcharts, copies of forms used and other pertinent information.

RECORDS

1. Is the preparation, addition, and posting of subsidiary other real estate owned records performed and/or tested by persons who do not have direct, physical or accounting, control of those assets?
2. Are the subsidiary other real estate owned records balanced at least annually to the appropriate general ledger accounts by persons who do not have direct, physical or accounting, control of those assets?
3. Is the posting to the general ledger other real estate owned accounts approved, prior to posting, by persons who do not have direct, physical or accounting, control of those assets?
4. Are supporting documents maintained for all entries to other real estate owned accounts?
5. Are acquisitions and disposals of other real estate owned reported to the board of directors or its designated committee?
6. Does the bank maintain insurance coverage on other real estate owned including liability coverage where necessary?
7. Are all parcels of other real estate owned reviewed at least annually for:
   a. Current appraisal or certification?
   b. Documentation inquiries and offers?
   c. Documented sales efforts?
   d. Evidence of the prudence of additional advances?

OTHER PROCEDURES

8. Are the bank's policies and procedures relating to the real estate owned in writing?

CONCLUSION

9. Is the foregoing information an adequate basis for evaluating internal control in that there are no significant deficiencies in areas not covered in this questionnaire that impair any controls? Explain negative answers briefly, and indicate any additional examination procedures deemed necessary.
10. Based on a composite evaluation, as evidenced by answers to the foregoing questions, internal control is considered (adequate/inadequate).

OTHER ASSETS

Introduction

The term ''other assets,'' as used in this section, includes all balance sheet asset accounts not covered specifically in other areas of the examination. Such accounts often may be quite insignificant to the overall size of the bank. However, significant subquality assets may be discovered in banks lacking proper internal controls and procedures.

In many banks, ''other assets'' accounts are maintained on the daily statement but must be reflected in a specific asset category for reporting. Schedule RC-F of the Consolidated Report of Condition lists the specific accounts classified as ''other assets'' and includes a catchall heading of ''other.'' (Certain ''other assets'' accounts, such as securities borrowed, are discussed in other sections of this manual.)

Types of Accounts

Types of ''other assets'' frequently found in banks are the various temporary holding accounts such as suspense, interoffice, teller, transit, and bookkeeping differences having debit balances. Those accounts should be used only for temporary recording until the offsetting entry is received or fully identified and posted to the proper account. Nothing should be allowed to remain in those accounts for any significant length of time; usually no more than a few business days. Banks should have written procedures to ensure that difference accounts are reconciled and closed out on a timely basis. In any event, all difference accounts should be closed out at least quarterly.

General categories of ''other assets'' common to banks on the accrual system are prepaid expenses and income earned not collected. Prepaid expenses represent cash outlay for goods and services, the benefits of which will be realized in future periods. Income earned not collected results from the differences between accrual and cash-basis accounting.

Another example of an account that may be found in the ''other assets'' category is an investment in a community development corporation called Minbanc Capital Corporation. Minbanc is an undiversified closed-end investment company created at the suggestion of the American Bankers Association. The company's primary objective is to make needed capital funds available to qualifying minority-owned banks so they may better contribute to the growth of their communities and the nation. Banks must have minimum of three years operating history to be eligible for the funds.

There are an unlimited number of account titles that could be included in the ''other assets'' category, from redeemed food stamps to art objects, antiques, and coin and bullion. Regardless, the examiner must design specific procedures for review and testing to fit the particular account and situation, and must document the scope of the review in the workpapers.

Scope of the Examination

Examiners assigned to review ''other assets'' must obtain the detailed breakdown of such accounts both when they are reflected as such on the bank's statement of condition and when they are designated as such for reporting purposes. When the account can best be examined by examiners assigned to other areas of the bank, the detailed breakdown of the accounts should be furnished to those examiners. The remaining accounts should be reviewed and evaluated by examiners assigned to this section.

The major factor in deciding which accounts are to be reviewed is materiality; however, even accounts with small balances may be significant. The examiner should evaluate whether to analyze the nature and quality of each individual item, based upon its impact on the overall soundness of the bank or the quality of its earnings. In this regard, it is important that the examiner verify—

- the existence of the asset;
- the proper valuation of the asset; and
- the adequacy of the accounting and disposition controls, as well as the quality, of the asset.

An examiner should authenticate the existence of the assets selected by ensuring adequate supporting documentation. Also, the examiner should verify that ownership of the asset rests with the bank. (In the case of organizational costs borne by the bank for formation of a holding company, those costs, and the related ownership rights in the capitalized asset, should more properly be borne by the ownership interests and should not be recorded as assets of the bank.)

Proper valuation and reporting of ‘‘other assets’’ accounts is another potential area of concern for the examiner. Assets are generally acquired through purchase, trade, repossession, prepayment of expenses, or accrual of income. Generally, assets purchased, traded, or repossessed are transferred at their fair market value. Prepaid expenses and income accrued are booked at cost. An examiner should be particularly alert in identifying those assets that lose value over time to ensure that they are appropriately depreciated or amortized. All intangible assets should be regularly amortized and management should have a system in place to confirm the valuation of the remaining book balance of the intangible assets. The examiner should ensure that the book balance of key man life insurance policies owned by the bank reflects the surrender charge, if any.

Examiners need to review the net deferred tax assets that banks report in their regulatory reports and use to meet capital requirements. Net deferred taxes generally arise from the tax effects of reporting income or expense charges in one period for financial statement purposes and in another period for tax purposes. This effect, known as a temporary difference, is at times sizeable. Charges that result in a significant deferred tax asset are often caused by loan loss provisions exceeding tax bad debt deductions in a given period. While banks are permitted to carry deferred income tax assets on their reports of condition, they are limited by generally accepted accounting principles (GAAP) to the extent these items can be carried.

The Financial Accounting Standards Board (FASB) Statement on Accounting for Income Taxes, No. 109, requires a deferred tax asset to be recognized for all deductible temporary differences and operating loss or tax credit carryforwards, and then be reduced by a valuation allowance if it is expected that some or all of the deferred tax asset will not be realized. Banks must adopt Statement No. 109 as of January 1, 1993, or the beginning of their first fiscal year thereafter, if later.

The Federal Financial Institutions Examination Council has recommended that the regulatory agencies place a limit on the amount of deferred tax assets allowable in computing an institution’s core (tier 1) capital. The limit would consider the sources of taxable income available to an institution to realize its deferred tax assets as if it were a separate taxpayer. Deferred tax assets that can be realized from taxes paid in prior carryback years and from future reversals of existing taxable temporary differences generally would not be limited. To the extent that the realization of deferred tax assets is dependent on an institution’s future taxable income (exclusive of reversing temporary differences and carryforwards) or its tax-planning strategies, such deferred tax assets would be limited for regulatory capital purposes to the amount that can be realized within one year of the quarter-end report date or 10 percent of core capital, whichever is less. It is anticipated that the agencies will request comment on this proposed capital limitation in the near future.

The examiner should ensure that the controls concerning ‘‘other assets’’ protect the bank’s ownership rights, that the accounts are properly valued and accurately reported, and that activity is monitored regularly by management. A bank with good control and review procedures will periodically charge-off all uncollectible or unreconcilable items. However, the examiner must frequently go beyond the general ledger control accounts and scan the underlying subsidiary ledgers to determine that posting errors and/or the common practice of netting certain accounts against each other do not cause significant balances to go unnoticed because of lack of proper detail.

OTHER LIABILITIES

Introduction

The term ‘‘other liabilities,’’ as used in this section, includes all balance sheet liability accounts not covered in other specific liability categories or in other areas of the examination. The accounts often may be quite insignificant to the overall size of a bank. In some banks, specific accounts are established for control purposes and appear on the balance sheet as ‘‘other liabilities.’’ For reporting, however, these accounts must be assigned to specific liability categories or netted from related asset categories, as appropriate.

Schedule RC-G of the Consolidated Report of Condition lists the specific accounts classified as ''other liabilities'' and includes a catchall heading of ''other.'' (Certain ''other liabilities'' accounts, such as securities borrowed, minority interest in consolidated subsidiaries, and dividends declared but not yet payable, are discussed in other sections of this manual.)

Types of Accounts

A general category of ''other liabilities'' common to banks using accrual systems is expenses accrued and unpaid. These accounts represent periodic charges to income based on anticipated or contractual payments of funds to be made at a later date. They include items such as interest on deposits, taxes, and expenses incurred in the normal course of business. There should be a correlation between the amount being accrued on a daily or monthly basis and the amount due on the stated or anticipated payment date.

The examiner should review ''other liabilities'' accounts to determine that accounts, such as deferred taxes (credit balance), are being properly recognized. This review should also determine that matters such as pending tax litigation, equipment contracts, and accounts payable have been recorded properly and are being discharged in accordance with their terms and requirements.

Various miscellaneous liabilities may be found within the accounts, such as undisbursed loan funds, deferred credits, interoffice, suspense, and other titles denoting pending status. The number of possible items that could be included are unlimited, and the accounts should be reviewed to determine that they are used properly and that all such items are clearing in the normal course of business. Because of the variety of such accounts, the examiner must develop specific examination procedures to fit the particular account and situation.

Scope of the Examination

Examiners assigned to review ''other liabilities'' are responsible for obtaining the bank's breakdown of those accounts and, when they are to be examined under other sections, they must ensure that examiners in charge of those sections receive the necessary information. The remaining accounts should be reviewed and evaluated by examiners assigned to this section.

The major emphasis in examining this area should be on the adequacy of the controls and procedures employed by the bank in promptly recording the proper amount of liability. Without proper management attention, these accounts may be misstated, either advertently or inadvertently. For instance, fraudulent entries in suspense or interbranch accounts could be rolled over every other day to avoid stale dates, causing shortages of any amount to be effectively concealed for indefinite periods of time.

Like ''other assets,'' ''other liabilities'' accounts with small balances may be significant. Scanning account balances may disclose a recorded liability, but it does not aid in determining whether liability figures are accurate. Therefore, it is important to review information obtained from examiners working with the board of directors' minutes, minutes of committees, and responses from legal counsel handling litigation because these documents might reveal a major understatement of liabilities. Determining accurate balances in ''other liabilities'' accounts requires an in-depth review of source documents or other accounts from which the liability arose.

Other Assets and Other Liabilities
Examination Objectives
Effective date May 1993

Section 2210.2

1. To determine if policies, practices, procedures, and internal controls regarding ‘‘other assets’’ and ‘‘other liabilities’’ are adequate.
2. To determine that bank officers and employees are operating in conformance with established guidelines.
3. To evaluate the validity and quality of all ‘‘other assets.’’
4. To determine that ‘‘other liabilities’’ are properly recorded.
5. To determine the scope and adequacy of the audit function.
6. To determine compliance with laws and regulations.
7. To initiate corrective action when policies, practices, procedures, or internal controls are deficient or when violations of laws or regulations have been noted.

1. Complete or update the Internal Control Questionnaire, if selected for implementation.
2. Based on the evaluation of internal controls and the work performed by internal/external auditors, determine the scope of the examination.
3. Test for compliance with policies, practices, procedures, and internal controls in conjunction with performing the remaining examination procedures. Obtain a listing of any deficiencies noted in the latest review done by internal/external auditors from the examiner assigned ''Internal Control,'' and determine if appropriate corrections have been made.
4. Obtain from the examiner assigned ''Examination Strategy'' the list of ''other assets'' and ''other liabilities'' accounts.
5. Obtain a trial balance of ''other assets'' and ''other liabilities'' accounts, including a detailed listing of the interbank accounts and:
   a. Agree or reconcile balances to department controls and general ledger.
   b. Review reconciling items for reasonableness.
6. Scan the trial balances for:
   a. Obvious misclassifications of accounts and, if any are noted, discuss reclassification with appropriate bank personnel and furnish a list to appropriate examining personnel.
   b. Large, old, or unusual items and, if any are noted, perform additional procedures as deemed appropriate, being certain to appraise the quality of ''other assets.''
   c. ''Other assets'' items that represent advances to related organizations, directors, officers, employees, or their interests, and if any are noted, inform the examiner assigned ''Loan Portfolio Management.''
7. Determine that amortizing ''other assets'' accounts are being amortized over a reasonable period correlating to their economic life.
8. If the bank has outstanding customer liability under letters of credit, obtain and forward a list of the names and amounts to the examiner assigned ''Loan Portfolio Management.''
9. Review the balance of any ''other liabilities'' owed to officers, directors, or their interests and investigate, by examining applicable supporting documentation, whether they have been used to—
   a. record unjustified amounts; or
   b. record amounts for items unrelated to bank operations.
10. Develop, and note in the workpapers, any special programs considered necessary to properly analyze any remaining ''other assets'' or ''other liabilities'' account.
11. Test for compliance with applicable state laws and regulations.
12. For ''other assets'' items that are determined to be stale, abandoned, uncollectible, or carried in excess of estimated values, and for ''other liabilities'' items that are determined to be improperly stated, after consulting with the examiner-in-charge, request management to make the appropriate entries on the bank's books.
13. Prepare, in appropriate report form, and discuss with appropriate officer(s):
    a. Violations of laws and regulations.
    b. Criticized ''other assets.''
    c. The adequacy of written policies relating to ''other assets'' and ''other liabilities.''
    d. Recommended corrective action when policies, practices, or procedures are deficient.
14. Update the workpapers with any information that will facilitate future examinations.

Other Assets and Other Liabilities
Internal Control Questionnaire
Effective date May 1993

Section 2210.4

Review the bank's internal controls, policies, practices, and procedures concerning "other assets" and "other liabilities." The bank's systems should be documented in a complete and concise manner and should include, where appropriate, narrative descriptions, flowcharts, copies of forms used, and other pertinent information.

OTHER ASSETS

Policies and Procedures

1. Has the bank formulated written policies and procedures governing "other assets" accounts?

Records

2. Is the preparation of entries and posting of subsidiary "other assets" records performed or tested by persons who do not also have direct control, either physical or accounting, of the related assets?
3. Are the subsidiary "other assets" records, if any, balanced at least quarterly to the appropriate general ledger accounts by persons who do not also have direct control, either physical or accounting, of the related assets?
4. Is the posting of "other assets" accounts to the general ledger approved prior to posting by persons who do not also have direct control, either physical or accounting, of the related assets?
5. Are worksheets or other supporting records maintained to support prepaid expense amounts?
6. Are supporting documents maintained for all entries to "other assets"?
7. Are the items included in suspense accounts aged and reviewed for propriety regularly by responsible personnel?

Receivables

8. Are receivables billed at regular intervals? (If so, state frequency ____________.)
9. Are receivables reviewed at least quarterly for collectibility by someone other than the originator of the entry?
10. Is approval required to pay credit balances in receivable accounts?
11. Do credit entries to a receivables account, other than payments, require the approval of an officer independent of the entry preparation?

Other Procedures

12. Does charge-off of a nonamortizing "other asset" initiate review of the item by a person not connected with entry authorization or posting?
13. Do review procedures, where applicable, provide for an appraisal of the asset to determine the propriety of the purchase or sale price?

Conclusion

14. Does the foregoing information provide an adequate basis for evaluating internal controls in that deficiencies in areas not covered by this questionnaire do not significantly impair any controls? Explain negative answers briefly, and indicate any additional examination procedures deemed necessary.
15. Are internal controls adequate based on a composite evaluation, as evidenced by answers to the foregoing questions?

OTHER LIABILITIES

Policies and Procedures

1. Has the bank formulated written policies and procedures governing the "other liabilities" accounts?

Records

2. Does the bank maintain subsidiary records of items comprising "other liabilities"?

3. Is the preparation of entries and posting of subsidiary ''other liabilities'' records performed or tested by persons who do not also originate or control supporting data?
4. Are subsidiary records of ''other liabilities'' balanced at least monthly to appropriate general ledger accounts by persons who do not also originate or control supporting data?
5. Are the items included in suspense accounts aged and reviewed for propriety regularly by responsible personnel?

Other Procedures

6. Does the bank book obligations immediately on receipt of invoices or bills for services received?
7. If the bank uses a Federal Reserve deferred credit account, is the liability for incoming ''Fed'' cash letters booked immediately upon receipt?
8. Does the bank book dividends that have been declared but are not yet payable?
9. Are invoices and bills proved for accuracy prior to payment?
10. Are invoices and bills verified and approved by designated employees prior to payment?
11. Are procedures established to call attention, within the discount period, to invoices not yet paid?
12. Does the bank have a system of advising the board of directors of the acquisition and status of major ''other liabilities'' items?
13. Are all payroll tax liabilities agreed to appropriate tax returns and reviewed by an officer to ensure accuracy?

Conclusion

14. Does the foregoing information provide an adequate basis for evaluating internal controls in that deficiencies in areas not covered by this questionnaire do not significantly impair any controls? Explain negative answers briefly, and indicate any additional examination procedures deemed necessary.
15. Are internal controls adequate based on a composite evaluation, as evidenced by answers to the foregoing questions?